DOCUMENT RESUME

ED 226 866 PS 013 411

TITLE	Lead Poisoning and Children. Hearing Before the Subcommittee on Health and the Environment of the Committee on Energy and Commerce. House of Representatives, Ninety-Seventh Congress, Second Session (December 2, 1982).
INSTITUTION	Congress of the U.S., Washington, DC. House Committee on Energy and Commerce.
REPORT NO	House-97-184
PUB DATE	2 Dec 82
NOTE	105p.
PUB TYPE	Legal/Legislative/Regulatory Materials (090)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	*Block Grants; Environmental Influences; *Financial Needs; *Health Needs; Hearings; *Lead Poisoning; Pollution; *Public Health; *Revenue Sharing
IDENTIFIERS	Congress 97th; Reagan Administration

ABSTRACT

These hearings examine the problem of lead poisoning in children and explore the consequences of the transfer of funds for lead-screening efforts to the maternal child health block grant. Lead toxicity is described as probably the most significant and pervasive environmental illness in the United States. Testimony asserts that the effect of the block grant approach to funding lead screening has been severe, with reductions in operating budgets and numbers of children screened. Furthermore, witnesses conclude that the block grant approach has failed with respect to lead-screening programs. Recommendations for remedying the situation, focusing mainly on the restoration of lead-screening programs to categorical funding status, are offered. Pediatricians, public health personnel, and academicians giving testimony describe the effects of lead poisoning on the nervous systems of children and on the chromosomes of adult workers and point out the need for continued program funding. Also included in the record are (1) a legislative history of the lead-based paint poisoning prevention program and (2) a review of how block grants have affected 10 of the nation's most needed lead-screening programs. (RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

LEAD POISONING AND CHILDREN

ED226866

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

HEARING

BEFORE THE

SUBCOMMITTEE ON HEALTH AND THE ENVIRONMENT

OF THE

COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES

NINETY-SEVENTH CONGRESS

SECOND SESSION

December 2, 1982

Serial No. 97-184

PS013411

Printed for the use of the Committee on Energy and Commerce

U.S. GOVERNMENT PRINTING OFFICE

14-591 O WASHINGTON : 1983

COMMITTEE ON ENERGY AND COMMERCE

JOHN D. DINGELL, Michigan, *Chairman*

JAMES H. SCHEUER, New York
RICHARD L. OTTINGER, New York
HENRY A. WAXMAN, California
TIMOTHY E. WIRTH, Colorado
PHILIP R. SHARP, Indiana
JAMES J. FLORIO, New Jersey
ANTHONY TOBY MOFFETT, Connecticut
JIM SANTINI, Nevada
EDWARD J. MARKEY, Massachusetts
THOMAS A. LUKEN, Ohio
DOUG WALGREN, Pennsylvania
ALBERT GORE, Jr., Tennessee
BARBARA A. MIKULSKI, Maryland
RONALD M. MOTTL, Ohio
PHIL GRAMM, Texas
AL SWIFT, Washington
MICKEY LELAND, Texas
RICHARD C. SHELBY, Alabama
CARDISS COLLINS, Illinois
MIKE SYNAR, Oklahoma
W. J. "BILLY" TAUZIN, Louisiana
RON WYDEN, Oregon
RALPH M. HALL, Texas
JAMES T. BROYHILL, North Carolina
CLARENCE J. BROWN, Ohio
JAMES M. COLLINS, Texas
NORMAN F. LENT, New York
EDWARD R. MADIGAN, Illinois
CARLOS J. MOORHEAD, California
MATTHEW J. RINALDO, New Jersey
MARC L. MARKS, Pennsylvania
TOM CORCORAN, Illinois
GARY A. LEE, New York
WILLIAM E. DANNEMEYER, California
BOB WHITTAKER, Kansas
THOMAS J. TAUKE, Iowa
DON RITTER, Pennsylvania
HAROLD ROGERS, Kentucky
CLEVE BENEDICT, West Virginia
DAN COATS, Indiana
THOMAS J. BLILEY, Jr., Virginia

FRANK M. POTTER, Jr., *Chief Counsel and Staff Director*
SHARON E. DAVIS, *Chief Clerk/Administrative Assistant*
DONALD A. WATT, *Printing Editor*
RANDALL E. DAVIS, *Minority Counsel*

SUBCOMMITTEE ON HEALTH AND THE ENVIRONMENT

HENRY A. WAXMAN, California, *Chairman*

JAMES H. SCHEUER, New York
THOMAS A. LUKEN, Ohio
DOUG WALGREN, Pennsylvania
BARBARA A. MIKULSKI, Maryland
RON WYDEN, Oregon
JAMES J. FLORIO, New Jersey
ANTHONY TOBY MOFFETT, Connecticut
RICHARD C. SHELBY, Alabama
PHIL GRAMM, Texas
MICKEY LELAND, Texas
JOHN D. DINGELL, Michigan
(Ex Officio)
EDWARD R. MADIGAN, Illinois
CLARENCE J. BROWN, Ohio
WILLIAM E. DANNEMEYER, California
BOB WHITTAKER, Kansas
DON RITTER, Pennsylvania
CLEVE BENEDICT, West Virginia
THOMAS J. BLILEY, Jr., Virginia
JAMES T. BROYHILL, North Carolina
(Ex Officio)

KAREN NELSON, *Staff Director*
TIMOTHY M. WESTMORELAND, *Assistant Counsel*
RUTH KATZ, *Assistant Counsel*
STEVEN R. BLAIR, *Associate Minority Counsel*

CONTENTS

Statement of: Page

Davis, Devra Lee, Baltimore, Md 93

Ehrnman, Karen, M.P.H., coordinator, Committee for Lead Elimination Action, District of Columbia, and also Children's Hospital National Center 56

Hardy, George E., Jr., M.D., Centers for Disease Control, Public Health Service, Department of Health and Human Services 17

Illinois, State of, Office of the Governor 101

Johnson, Kirk A., M.S., assistant director, National Coalition for Lead Control, center for science in the public interest 28

Palumbo, Francis M., M.D., associate director of children and youth ambulatory services, Georgetown Hospital 65

Sencer, David J., M.D., commissioner of health, New York City 14

Silbergeld, Ellen K., Ph. D., chief toxics scientist, Environmental Defense Fund 72

Starfield, Barbara, M.D., M.P.H., on behalf of American Public Health Association 88

LEAD POISONING AND CHILDREN

THURSDAY, DECEMBER 2, 1982

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON HEALTH AND THE ENVIRONMENT,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, D.C.

The subcommittee met, pursuant to call, at 10:20 a.m., in room 2322, Rayburn House Office Building, Hon. Henry A. Waxman (chairman) presiding.

Mr. WAXMAN. The meeting of the subcommittee will come to order. Several of our colleagues will be joining us in a short time, after they respond to the vote on the House floor; but we are late in getting this meeting started, so I would like us to begin at this time.

This morning, the subcommittee will examine one of our most discouraging public health problems: the preventable poisoning of our Nation's children by lead.

According to a recent national survey, an unacceptable 4 percent of the children in this country aged 6 months through 5 years have high blood-lead levels. The problem is particularly acute among poor, minority children in inner-city neighborhoods.

Lead poisoning threatens the life chances of these children. Depending on the extent of the poisoning, a child may experience retardation, behavioral difficulties, and learning disorders.

The real tragedy is that this damage is preventable. We have the technology to detect high blood-lead levels. Screening children for lead poisoning is not very expensive, and the cost pales in comparison to the cost of educating and treating them once their brains have been damaged.

This is not a new problem. Over 10 years ago, Congress enacted legislation to address it. Known as the lead-based paint poisoning prevention program, the legislation made grant funds available to local governments primarily to detect and treat poisoning that occurs when young children eat lead-based paint. Between 1972 and 1980, the program screened nearly 3½ million children.

In 1981, the Reagan administration proposed to repeal this program and to put 75 percent of the funding into a large preventive health block grant with 10 other programs. Eventually, it was included in the maternal and child health services block grant, and the funding was cut 18 percent.

The result is sadly predictable. Funding for lead screening efforts plummeted from $8.4 million in fiscal year 1981 to $5.9 million in fiscal year 1983. At the same time, the cost of a screening went up. In the 24 States for which data are available, staff estimates that

the number of children screened will drop from nearly 1.1 million in fiscal year 1981 to about 640,000 in this fiscal year.

I would at this point ask unanimous consent to insert in the record a legislative history of the lead-based paint poisoning prevention program and a table describing Federal funding for this activity from fiscal year 1981 to fiscal year 1983, on a State-by-State basis.

The purpose of this hearing is to explore the consequences of these disturbing trends for the children and the Federal Government.

What are the causes of lead poisoning, and what effect does it have on the health and the life chances of children?

What has happened to Federal, State, and local efforts to address childhood lead poisoning?

How can we avoid further loss of resources for lead screening and treatment?

[The legislative history and table referred to follow:]

LEGISLATIVE HISTORY OF THE LEAD-BASED PAINT POISONING PREVENTION PROGRAM

Susan Bailey
Analyst in Social Legislation
Education and Public Welfare Division
September 28, 1982

I. ENACTMENT OF THE LEAD-BASED PAINT POISONING PREVENTION PROGRAM

In 1971, Congress enacted the Lead-Based Paint Poisoning Prevention Act, P.L. 91-695, to authorize programs to eliminate the causes of lead-based paint poisoning and detect and treat incidents of such poisonings. Prior to that time, no Federal authority existed to specifically fund such projects. However, some financial assistance was available to local communities for screening and treatment services under Section 314 of the Public Health Service (PHS) Act and title V, Maternal and Child Health and Crippled Childrens Services, of the Social Security Act. 1/ In addition, other localities funded their own lead control programs to which the Department of Health, Education, and Welfare (HEW) provided technical assistance. 2/

Congress enacted P.L. 91-695 in response to concerns that childhood lead poisoning was reaching epidemic proportions in most large cities. Hearings on the proposed legislation invariably documented the cause of such poisoning as the repeated ingestion of chips and flakes of lead-containing paint and plaster from the walls, windowsills, and woodwork of old and poorly maintained pre-World War II homes. 3/ In general, these residences were located in inner cities, inhabited by low-income families with large numbers of children. As a result, the

---

1/ U.S. Congress. Senate. Labor and Public Welfare Subcommittee on Health. Hearing on Lead Based Paint Poisoning, 91st Cong., 2d Sess., Nov. 23, 1970. p. 200-201.

2/ Ibid, p. 43.

3/ U.S. Congress. House. Banking and Currency Subcommittee on Housing. Hearing to Provide Federal Assistance for Eliminating the Causes of Lead-Based Paint Poisoning, 91st Cong., 2d Sess., July 22 and 23, 1970. p. 10.

high incidence of lead poisoning was almost solely confined to young children living in city slums. 4/

About 200 children died from lead poisoning each year with 2 year olds accounting for more than 50 percent of those deaths. Other children suffered irreversible brain injury. An estimated 400,000 children per year were lead sick, according to the Senate Labor and Public Welfare Committee report on the 1971 legislation. Although 12,000 to 16,000 children were annually treated for lead poisoning and survived, half of them remained mentally retarded. 5/ The House Banking and Currency Committee 6/ report on the legislation stated that children inflicted with lead poisoning required lifetime medical treatment estimated to cost about $250,000 per child. The cost of removing lead paint from residential housing units was relatively small in comparison. 7/

P.L. 91-695 authorized two project grant programs to be administered by DHEW. Title I of the Act authorized grants to local governments to detect and treat incidents of lead-based paint poisoning. Localities were to offer:

4/ U.S. Congress. House. Committee on Banking and Currency. Lead-Based Paint Elimination Act of 1970. Report to Accompany H.R. 19172. House Rept. No. 91-1463, 91st Cong., 2d Sess. Washington, U.S. Govt. Print. Off., 1977. p. 2.

5/ U.S. Congress. Senate. Committee on Labor and Public Welfare. Lead-Based Paint Elimination Act of 1970. Report to Accompany H.R. 19172. Senate Rept. No. 91-1432, 91st Cong., 2d Sess. Washington, U.S. Govt. Print. Off., 1970. p. 2.

6/ The authority for the Lead-Based Paint Poisoning Prevention program was transferred in 1974 from the House Banking and Currency Committee to the Interstate and Foreign Commerce Committee as a result of changes made in committee jurisdiction by the Bolling Committee.

7/ U.S. Congress. House. Committee on Banking and Currency. Lead-Based Paint Elimination Act of 1970. Report to Accompany H.R. 19172. p. 3.

(1) educational programs to alert the community to the health hazards and prevalence of lead-based paint poisoning among children of inner city areas; (2) testing programs to detect incidents of lead-based paint poisoning among community residents, and prompt medical treatment for afflicted individuals; (3) intensive followup programs to insure identified cases of lead-based paint poisoning were protected against further exposure to lead-based paints in their living environment; and (4) other activities to eliminate lead-based paint poisoning. Title II of the Act authorized grants to local governments to conduct testing programs to detect the presence of lead-based paints on residential surfaces, and then to eliminate such hazards from all interior surfaces, porches, and exterior surfaces to which children were commonly exposed.

Title III of the Act required the Secretary of Housing and Urban Development (HUD), in consultation with the Secretary of HEW, to operate a demonstration and research program to study the problem of lead-based paint poisoning in the U.S., particularly in urban areas. Title IV of P.L. 91-695 prohibited the future use of lead-based paint in residential structures constructed or rehabilitated by the Federal government or with any form of Federal assistance.

The Act also defined "lead-based paint" to mean any paint containing more than 1 percent lead by weight (calculated as lead metal) in the total non-volatile content of liquid paints or in the dried film of paint already applied. P.L. 91-695 authorized the following amounts for these programs:

	FY 1971	FY 1972
Title I	$3,330,000	$ 6,660,000
Title II	5,000,000	10,000,000
Title III	1,670,000	3,340,000
Total	$10,000,000	$20,000,000

II. PROGRAM AMENDMENTS

The programs first authorized by P.L. 91-695 were revised and extended through FY 1974 8/ by P.L. 93-151 and through FY 1978 by P.L. 94-317.

These Acts did not change the basic legislation. Major amendments centered around defining a safe content level of lead in paint. In 1973, P.L. 93-151 changed the definition of lead-based paint to provide that prior to December 31, 1974, any paint containing more than 0.5 percent lead would be considered lead-based. The Act also directed the Consumer Product Safety Commission (CPSC) Chairman to conduct research to determine a safe content level of lead in residential paint products and report his findings to Congress before December 31, 1974. This requirement was prompted by Congressional concern that while present research demonstrated that 0.5 percent lead was a safe standard, further research was needed to determine a more precise level. Unless the CPSC Chairman recommended another lead level to be safe (which still could not exceed 0.5%), paint containing more than 0.06 percent lead by weight would be defined as lead based after December 31, 1974.

In December 1974, the CPSC Chairman recommended that Congress, continue the existing requirement that lead levels for interior residential paints remain at 0.5 percent. However, this decision was criticized, largely based on the research supporting it. 9/

8/ The program was not reauthorized until FY 1974. FY 1973 funding was provided under a continuing resolution.

9/ U.S. Congress. House. Committee on Interstate and Foreign Commerce. National Health Promotion and Disease Prevention Act of 1976. Report to Accompany H.R. 12678. House Rept. No. 94-1007, 94th Cong., 2d Sess. Washington, U.S. Govt. Print. Off., 1976. p. 19.

As a result, in 1975, P.L. 94-317 directed the CPSC to further study, conduct hearings, and consider recommendations from the Secretary of HEW and the National Academy of Science to determine a safe lead level that could range between .06 percent and .5 percent. The Act then defined lead-based paint as paint containing more than .06 percent lead by weight in the total nonvolatile content of the paint, or the equivalent measure of lead in the dried film of paint already applied, or both, unless the CPSC's study determined another level to be safe (not to exceed 0.5 percent). Currently the definition of lead content in paint remains at .06 percent.

In addition to redefining lead-based paint, P.L. 93-151 and P.L. 94-317 changed authorization levels. P.L. 93-151 significantly increased program authorization levels to the following amounts:

	FY 1974	FY 1975
Title I	$25,000,000	$25,000,000
Title II	35,000,000	35,000,000
Title III	3,000,000	3,000,000
	$63,000,000	$63,000,000

In contrast, P.L. 94-317 consolidated and decreased authorization levels for the program to $10,000,000; $12,000,000; and $14,000,000 for FY 1976, FY 1977, and FY 1978, respectively. These decreases related authorizations more closely to amounts appropriated for lead-based paint programs. Although $20,000,000 had been authorized in FY 1972 for these activities, Congress appropriated $6,500,000. A more dramatic difference occurred in FY 1975 when $63,000,000 was authorized for the program with one-seventh of that amount--$9,000,000--appropriated.

P.L. 93-151 and P.L. 94-317 also made a number of other amendments to the lead-based paint programs. In 1973, P.L. 93-151 authorized grants, under title I, to State agencies to establish centralized laboratory facilities to analyze biological and environmental lead specimens obtained from local lead-based paint poisoning

detection programs and expanded the eligibility for grants to private nonprofit organizations. The 1973 Act also prohibited the application of lead-based paint to toys, furniture, and cooking or eating utensils. In 1976, P.L. 94-317 clarified responsibilities for the agencies, DHEW, HUD, and CPSC, administering existing authorities under the legislation (DHEW, HUD, and CPSC).

In 1978, P.L. 95-626 repealed titles I and II of P.L. 91-695 and amended Part A of title III of the Public Health Service Act to authorize the lead-based paint poisoning prevention programs under Sec. 316. The Act extended the program through FY 1981 and authorized $14,000,000 for each of the fiscal years 1979 and 1980, and $15,000,000 in FY 1981 for the program.

III. CONSOLIDATION UNDER THE MCH BLOCK GRANT

The lead-based paint poisoning prevention program was most recently amended by the Omnibus Budget Reconciliation Act, P.L. 97-35, which consolidated the program under the MCH Services Block Grant with 7 other Federal health programs. The Reagan Administration, in its Budget proposal for FY 1982, originally proposed to consolidate 10 categorical programs including lead-based paint into a Preventive Health Services Block Grant, and an additional 15 such programs including the MCH program into a Health Services Block Grant. Under these blocks, States would decide on the use of block grant funds, services to be provided, and populations to be served. At the same time, Federal funding for these programs would be reduced.

Concern was expressed that the inclusion of health programs for women and children in a block grant with other health programs would severely decrease funding for maternal and child health-related programs and reduce services available to these populations. As a result of these concerns, as well as others, Congress enacted

P.L. 97-35 which consolidated certain major Federal health programs for women and children into a single MCH Block Grant. According to its report on the legislation, the House Energy and Commerce Committee expected this consolidation to encourage States to develop a more systematic and comprehensive approach to providing health care to mothers and children, particularly those of low-income. 10/

Under the MCH Block, States elect the health services, including lead-based paint poisoning prevention services, they wish to provide. Between 85 and 90 percent of the block grant appropriation is allotted among States based on the State's proportion of total funds allotted to all States in FY 1981 under certain categorical programs now included in the block. These categorical programs include MCH and crippled childrens services, supplemental security income services for disabled children, lead-based paint poisoning prevention, genetic diseases, sudden infant death syndrome, hemophilia treatment centers, and adolescent pregnancy. In order to receive an allotment, States must spend three State dollars for every four Federal dollars received through the block grant. Between 10 and 15 percent of the block grant appropriation is reserved for MCH projects of regional and national significance, research and training, and genetic disease and hemophilia progams. These programs are administered at the Federal level.

P.L. 97-35 also required States to prepare annual reports describing their intended program expenditures; statements of assurances; and reports on block grant activities; as well as biennial audits on program expenditures.

10/ U.S. Congress. House. Committee on Energy and Commerce. Omnibus Budget Reconciliation Act of 1981. Report to Accompany H.R. 3982. House Rept. No. 97-158, Vol. II, 97th Cong., 1st Sess. Washington, U.S. Govt. Print. Off., 1981. p. 50.

IV. PROGRAM ACCOMPLISHMENTS

Since the enactment of the lead based paint poisoning prevention program, the percentage of screened children found to have dangerous levels of lead in their bloodstream has decreased from 7.5 percent in 1972 to 4 percent in 1981. Between 1972 and 1980, 3,475,000 children were screened by the program. Of that number, 228,000 were identified with lead toxicity. 11/ In 1981, 54 projects were funded under Sec. 316 of the PHS Act. 12/ During that year, 535,000 children were screened with 22,000 identified with lead toxicity. 13/

It should be noted that although these programs placed priority on screening inner city children for lead-based paint poisoning, all children were screened to detect this problem. Mass screenings in the 1970s provided evidence that children residing in old inner city slums were at the highest risk of lead poisoning, but the problem of undue exposure to lead extended far beyond "lead belts" and the poor. 14/ The cause of severe lead poisoning, with rare exceptions, remains ingestion of paint or exposure to other high dose sources, such as improperly glazed earthenware. 15/ However, a more careful look at the lead sources in a child's environment has shown that airborne lead (particularly lead settled in dust and dirt), represents an important source of exposure which can cause minor or moderate elevation of blood lead levels. 16/

11/ Telephone conversation with officials at the Centers for Disease Control (CDC), Department of Health and Human Services (DHHS), September 1982.

12/ Print-out from the Office of Maternal and Child Health, DHHS, received September 1982.

13/ Telephone conversation with CDC officials, September 1982.

14/ Chisolm, Julian J., Jr. and David M. O'Hara. Lead Absorption in Children. Baltimore-Munich, Urban and Schwarzenberg, 1982. p. 6.

15/ Ibid, p. 7.

16/ Ibid, p. 6.

FUNDING HISTORY, FY 1971-FY 1982

	Authorization	Appropriation
1971	$10,000,000	---
1972	20,000,000	$ 6,500,000
1973	2/	6,500,000 2/ 3/
1974	63,000,000	11,000,000 3/
1975	63,000,000	9,000,000
1976	10,000,000	3,500,000
1977	12,000,000	8,500,000
1978	14,000,000	8,500,000
1979	14,000,000	10,250,000
1980	14,000,000	11,250,000
1981	15,000,000	10,148,000
1982	4/	4/

1/ No appropriations were made for the research authority specified under title III of the P.L. 91-695. However, research has been conducted as directed by title III by the Department of Housing and Urban Development under its general research authority.

2/ The program was not reauthorized until FY 1974; FY 1973 funding was provided under a continuing resolution.

3/ An additional $4,500,000 was appropriated in FY 1973 but was impounded by the Admininistration. This amount was later made available in FY 1974 bringing the funding level for the program up to $11,000,000 for that year.

4/ P.L. 97-35 authorized $373,000,000 for the MCH Services Block Grant for FY 1982. Congress appropriated $347,520,000 under a continuing resolution for FY 1982. An additional $24,480,000 was provided under urgent supplemental appropriations increasing funding to $372,000,000 for FY 1982.

Source: Financial Management Branch, Centers for Disease Control, DHHS.

FEDERAL FUNDING FOR
LEAD-BASED PAINT POISONING PREVENTION
(IN THOUSANDS)
DECEMBER 2, 1982

STATE	FY 81*	FY 82**	FY 83**	PERCENT DECREASE (INCREASE) FY 81 - FY 83 ***
Arkansas	$ 157.2	$ 88.0	$ 88.0	44%
California	40.4	0.0	0.0	100%
Connecticut	199.4	199.4	173.5	13%
Delaware	115.7	151.9 (1/)	137.4	(19%)
District of Columbia	289.0	403.7 (2/)	137.0	53%
Georgia	241.4	210.0	173.9	28%
Illinois	795.0	(3/)	(3/)	NA
Indiana	-	-	83.1	(4/)
Iowa	30.0	24.0	0	100%
Kentucky	296.0	140.0	140.0	53%
Louisiana	250.0	202.6	202.6	19%
Maryland	416.2	304.0	304.0	27%
Massachusetts	735.8	735.8	735.8	0%
Michigan	600.7	450.5	450.5	25%
Missouri	627.7	45.0	45.0	93%
Nebraska	186.0	238.8	155.0	17%
New Jersey	1077.0	1206.0	1096.0	2%
New York	1699.0	1381.7	1217.0	19%
North Carolina	40.4	30.0	25.0	38%
Ohio	401.0	175.7	161.2	60%
Pennsylvania	609.7	740.0	3/	NA
Rhode Island	153.8	150.0	150.0	0%
South Carolina	415.2	NA	170.0	41%
Tennessee	NA	NA	NA	NA
Texas	53.8	0.0	0.0	100%
Virginia	352.9	140.0	140.0	60%
Wisconsin	375.0	228.0	111.6	60%

Chart prepared by Subcommittee staff based on information supplied by the Department of Health and Human Services and Congressional Research Service. These figures do not reflect funding for lead screening activities, if any, from Federal housing and environmental programs.

* Grants under categorical lead-based paint poisoning prevention program.

** Funds under Maternal and Child Health Service Block Grant.

*** Does not reflect loss in purchasing power due to inflation.

1/ Increased funding in FY 1982 over FY 1981 is mainly due to increased adminstrative costs. Reflects some increase in services.

2/ Of this amount, $339,000 represents funds received under the categorical lead program between 7/1/81 and 6/30/82. The remainder, $64,700, represents funds allocated from D.C.'s Maternal and Child Health Block Grant between 7/1/82 and 9/30/82.

3/ State and local officials could not provide exact funding for lead activities under the Maternal and Child Health Services Block Grant.

4/ Indiana is allocating funds to lead screening for the first time.

Mr. WAXMAN. I would like to have the record note that we will, at this point, insert any opening statements that our colleagues wish to have made, had they been here, or to insert it even if they have not prepared a statement to deliver in person.

Our first witness is Dr. David J. Sencer, Commissioner of Health for the city of New York, and Kirk A. Johnson, assistant director, National Coalition for Lead Control, Center for Science in the Public Interest.

I would like to welcome you both to this hearing today.

Dr. Sencer is familiar to us, both in his former capacity as Director of the Centers for Disease Control and in his present position as Commissioner of Health for the city of New York.

I hope you will give us the views of the Federal and local governments with regard to this problem.

Ms. Mikulski.

Ms. MIKULSKI. I apologize that there was a delay in my arrival. In addition, I would just like to comment, Mr. Chairman—I would like to thank you for holding this most important hearing on lead poisoning and children.

You and I have done long battle on something called the Clean Air Act, and one of the areas we were most concerned about was the auto emissions and the lead content in that because of its public health damages.

We have not yet resolved the Clean Air Act. We know that we have a mechanism in this country that is realizable in achieving public health controls in this country, our special program to deal with lead poisoning prevention. We have gone to something called block grants, and that has meant that wonderful programs are now competing with each other for limited resources.

I thank you for holding this hearing to see what is the impact of that, because the Lead-based Poisoning Act is now in the maternal child health block grant.

I came to this Congress with a background in social work, and I remember, as a young welfare worker, going through the streets of Baltimore, and working with our local public health department, then one of the best in the country, because one of the enormous problems was the problem of lead paint in Baltimore's ghettos.

Even though we have accomplished a lot, we still have very serious problems. I am proud to say that in 1972, Baltimore was one of the first to establish a program when a national program was established. When I talk to my mayor and to the people at the Kennedy Institute, running a program like this, I find the need is still there.

Our problem is that the money is not there.

Now, I know what has happened in Baltimore, but I thank you for holding this hearing so we can see nationally if what is happening to the demise of my program in Baltimore is also happening nationally, and what is the impact of this on children, because if we can't protect children from lead-based poisoning, I think we have serious national problems.

I know we are debating nuclear waste on the House floor. We have been exploring what to do in case we are bombed in a nuclear war.

So, people said we should paint our houses with lead paint; 35 coats would do. A better way to protect America's children would be to rid housing of that lead-based paint.

Mr. WAXMAN. Thank you for your statement and kind words to me.

Dr. Sencer, we have your prepared statement and will make that a part of the record.

STATEMENT OF DAVID J. SENCER, M.D., COMMISSIONER OF HEALTH, NEW YORK CITY

Dr. SENCER. Thank you, Mr. Chairman, Ms. Mikulski. My prepared statement is not very well prepared, because yesterday I was in the State capital of New York State trying to find out what is happening to our lead-based-paint program in New York City. I had to find out before I could prepare the statement.

I am here today representing not only New York City, but also the Conference of City Health Officers. I do not propose to talk much about the problems of lead-based-paint poisoning. There are others testifying today who are much more expert in that area than I am. I would like to talk a little bit about the extent of the problem, how the funds are distributed, and the problems we are facing in trying to deal with these issues at the present time.

The problem is one that is a national problem, but not an equally distributed problem throughout the Nation. It is not equally distributed within the cities of this country. In New York City, for example, we have boroughs that have practically no lead-based-paint poisoning problem, and in other areas where as many as 3½ percent of the children screened have elevated blood-lead levels. This correlates very nicely with the older areas of any of our major Northern cities where the older housing was painted with lead-based paint. The costs of removing the paint, or renovating the housing, would be so astronomical that we have decided the simplest way is to protect children is by early education and treatment of those found to be in difficulty.

Lead poisioning is one of two Federal programs incorporated into the block grants but which are very unequally distributed throughout the country. Both are basically community environmental sanitation problems. The other program is the rodent control program, which again is a problem of the inner-city slums, which is being attacked as a health problem because of the prospect of rat bites. But the basic problem is our inner city. I would like to discuss these together because the etiologies are poverty and the mechanism of funding is similar.

When the Federal Government first began supporting State and local public health programs, the funding was a formula grant in the 1940's. This now is euphemistically being called a block grant, which some health officers say is a way of blocking services from reaching the people who are really in need of them. The formula grant at that time was for general public health programs, and it was derived by population figures weighted by per capita income with a minimum amount being guaranteed for each State. Since this was for general support of public health programs, there was no attempt made at that time to address the extent of problems.

When it became obvious that there were serious public health problems in this country that were geographically disproportionately distributed, Congress appropriated moneys for project grants distributed on the basis of health problem needs rather than by the number of people. It was found that there was no way in which a formula could be developed that would not be totally dominated by population.

In the 1960's, when there was increased concern over the failure of tuberculosis to respond to normal control measures, grants were made available for enhancing tuberculosis control. We tried to develop a formula to meet the needs, but there was no way in which a formula could be developed that would give more money to a State such as Arkansas which had a major tuberculosis problem without at the same time giving equal funds to Iowa, which had practically no tuberculosis.

In the 1940's and 1950's grants were made available to States for venereal disease control and tuberculosis control with a pass-through mechanism similar to a contract. In 1962, with the passage of the Immunization Assistance Act, grants were made directly to city and local health departments with the concurrence of the State health department. These programs have been successful in meeting the goals for which they were established by Congress. In New York City, for example, we have had 12 cases of indigenous measles this past year, and the last case was in September.

The lead-based-paint program and the rat grants have been traditionally to urban areas. This is where the problem is. As these programs have been blended into general maternal and child health and prevention grants, they have lost their identity of funding and have become general support again.

It is easy to say that State government will make the decision to continue these programs. Simultaneously with putting these grants into a block has come the 25-percent reduction that you have mentioned. If a State wants to focus on a problem that is more equally distributed throughout its population in maternal child health—for example, teenage pregnancy—this is an easier decision to make because it is throughout the whole State. But the money has to come from those programs which had at one point been categorical. There is nothing to prevent the State from taking these funds from lead-based-paint programs to put into something else.

Congress has recognized the unequal distribution of disease in dealing with venereal disease and immunization, and has recognized that reimbursement programs such as medicaid do not address these issues, they will not pay for the followup of venereal disease cases for example. These are costs that public health agencies have to bear themselves. Congress in the past has maintained a categorical approach to assisting programs that prevent disease in spite of the administration's efforts to lump these with other activities. Venereal disease and immunization still stand as separate programs.

I am a realist, and I recognize that increased Federal support at this time is unlikely for our programs. I am, however, an optimist, and I hope that Congress is realistic and can find a manner in which to assure the continuation of categorical support to those programs which are targeted to help the poor in our inner cities.

Thank you. I will be glad to answer any questions that you might have.

Mr. WAXMAN. Thank you, Dr. Sencer.

Could you estimate the cost to the State or the Federal Government of paying for long-term care for poisoned children?

Dr. SENCER. In 1976 there was an estimate of a quarter of a million dollars over a lifetime of a child. A more recent estimate in a book on lead-based-paint poisoning estimates that the social cost of excessive childhood lead approaches $1 billion annually.

Mr. WAXMAN. Now, our estimates are that New York State has cut lead poisoning funds by 19 percent, which is less than most other States. Can you estimate the number of children who are not being screened as a result of the cutback in New York?

Dr. SENCER. This is a proposed cut for the future. We are able to continue screening at about the same level that we had before. New York State did not accept management of the block grant until this year, so we have not been as hurt as other parts of the country. However, in the next year that although we may be able to screen almost as many children, the actual screening is not the expensive part. It is the followup of the children, bringing them to needed diagnostic services, that is expensive and is in jeopardy. We estimate that we are going to probably have to diminish our activities by 25 to 30 percent to meet our increased costs of operation. Coupled with the increase in cost and the decrease in amount of moneys available from the State, I think there will be about 30 percent fewer children followed than there are at the present time.

Mr. WAXMAN. What does that mean? You can do the screening. That means you measure the level of lead in the blood?

Dr. SENCER. Yes, as part of our routine well-baby care in certain areas of the city where we know that there is a possibility of eating lead-based paint, this is part of our routine infant care. When a child gets a hemoglobin, they get a finger prick that can be rapidly screened for lead.

Mr. WAXMAN. You know this information and when you find elevated levels, what happens?

Dr. SENCER. This means bringing the child back for additional blood tests to confirm that finding. It means investigating the home to see whether there are exposed surfaces, instituting corrective action, at times taking legal action against the landlord and the cost of bearing part of treating the child after that. Those are the kinds of things that we will not be able to do.

Mr. WAXMAN. In other words, you will tell most likely the mother of a child who has high levels of lead in the blood that her child has high levels of lead in the blood and if she can go do something about it, she should go do something about it. That may mean that they will have to go out and pay for services.

Dr. SENCER. If a child has an urgently high level, we will find a way to do it. The problem comes up that by not being able to do the community work we cannot get back to the houses to make sure this does not happen again. We know that the same families will come back unless action is taken in the home. These are the sorts of things we will not be able to do.

Mr. WAXMAN. You talked about the block grant and we did create a block grant to have the States take over this program with

less money and have this program complete with other programs. Secretary Schweiker said that we are going to have the States voluntarily gather data on their maternal and child health efforts and HHS will look for data in these reports. Have you received guidelines from HHS or the State for reporting on lead poisoning?

Dr. SENCER. We have not received those as yet. As program operators we will maintain a certain basic level of information so we can make plans with our reduced resources. Whether our type of data-gathering is going to be consonant with the rest of the country so that logical decisions can be made in the future, I cannot say.

Mr. WAXMAN. Thank you very much for your testimony. Mr. Leland, do you have any questions for Dr. Sencer?

Mr. LELAND. No, thank you.

Mr. WAXMAN. We thank you for your testimony. It has been helpful to us.

Mr. Johnson, before I call upon you I would like to call Dr. George Hardy from the Centers for Disease Control to testify. Please stay where you are. Dr. Hardy is representing the Reagan administration. He is well known to this committee, having worked with the former chairman, Mr. Harley Staggers, for some time, and now serving as Assistant Director of the Centers for Disease Control. I am pleased to see you again in your new capacity, and I am anxious to hear the message you bring us from the administration.

STATEMENT OF GEORGE E. HARDY, Jr., M.D., CENTERS FOR DISEASE CONTROL, PUBLIC HEALTH SERVICE, DEPARTMENT OF HEALTH AND HUMAN SERVICES

Dr. HARDY. Thank you, Mr. Chairman, for your kind welcome.

Mr. WAXMAN. Your prepared statement will be made part of the record. We would like to ask you to summarize it so we will have a full opportunity for questions and answers.

Dr. HARDY. I will be pleased to summarize.

The occurrence of lead poisoning in children through direct exposure was first reported in Queensland, Australia, in 1892. The source of lead in these children remained a mystery until 1904, when lead paint was implicated. Over the years, a series of scientific events have shown the devastating effects (i.e., poor school performance and overt mental retardation) of lead poisoning on the brains of young children, documented first in the 1940's. In the 1950's and 1960's, hospitals in a few large cities such as Boston, New York, Chicago, Philadelphia, and Baltimore began systematically to screen high-risk children for lead poisoning. In 1979, Dr. Herbert Needleman, then with the Boston Children's Hospital, demonstrated the adverse effects of low-dose lead exposure. These effects include poor academic performance and behavioral problems.

There are many sources of lead in the environment. These include water, air, and food as background contributors. The usual high-dose sources are lead in paint and lead in dust and soil. The lead in dust and soil derives from lead in paint, lead from automobile and industrial emissions, and from previous land use, among others.

In 1970, the Surgeon General issued a statement which focused attention on prevention of childhood lead poisoning. The Congress gave support to this effort by enactment of the Lead Based Paint Poisoning Prevention Act, which you have referred to. That act had several features. Basically it provided a screening program for high-risk children under the direction of the then Department of Health, Education, and Welfare. It also directed HUD to eliminate hazards of lead-based-paint poisoning in houses it owned or assisted financially.

Since 1972, this Department has provided financial and technical assistance to States and communities for establishing programs to screen and identify children with lead toxicity and to provide the necessary medical and environmental interventions. Childhood lead toxicity is not equally distributed geographically, and grant funds were provided to those areas of greatest need. Over the years, categorical grant funds totaling approximately $90 million have been provided to more than 100 communities in 35 States and the District of Columbia.

The lead-based-paint poisoning prevention programs supported by HHS were designed with several interlocking program elements to insure their success. These elements were:

The screening of high-risk children;

The establishment of community education and outreach efforts;

The development and maintenance of laboratory analytic capabilities;

The assurance of appropriate medical care and followup for those found at risk of lead toxicity; and

The conduct of appropriate investigation and intervention in the environment of any child found to have lead toxicity, to identify and remove the sources of high-dose lead hazard from the environment of that child.

Since 1972, States and local childhood lead poisoning prevention programs have screened more than 4 million high-risk children and identified over 250,000 (6 percent) with lead toxicity. The programs identified lead hazards in 165,000 dwellings and eliminated those hazards in 112,000. In addition, CDC initially provided the necessary training and equipment to establish laboratory competence for accurately measuring blood lead. There are now over 100 laboratories which maintain that competence through proficiency testing programs and laboratory consultations. When the initial laboratory test of choice was changed from analysis of blood lead to erythrocyte protoporphyrin, CDC transferred that technology through grant funds and its laboratory training efforts and developed proficiency testing for over 200 laboratories in approximately 1 year.

Statistics from the grant programs would indicate that while the lead toxicity problem has not been solved, indeed there has been a marked reduction. For example, in 1973, 11.1 percent of children screened in high-risk project grant areas were identified with lead toxicity; whereas in 1981, only 4.1 percent of those screened were found to have the disease. In addition, the number of children being found with extremely high blood levels has been greatly reduced, and death and overt encephalopathy from this disease have become a rarity.

However, the recently completed second National Health and Nutrition Examination Survey (NHANES II) shows that the problem of lead toxicity in children is greater than previously anticipated. It showed that 4 percent of the children 6 months through 5 years of age had elevated blood lead levels. Findings for specific groups include: Children from inner cities of large urban areas—11.6 percent; children from smaller urban areas—3.5 percent; and children from rural areas—2.1 percent. The blood lead levels of black children are higher than those of white children, though in white children from relatively affluent families 0.7 percent—or seven children in every thousand—were still found to have elevated blood lead levels.

As you have indicated, beginning October 1, 1981, the grant funds for the childhood lead-based-paint poisoning prevention programs were consolidated by the Congress into the maternal and child health program block grant. A major purpose of the block grants is to achieve greater flexibility for the States in their use of Federal funds. With block grants, the States can tailor their spending to meet their own needs. Public notice of the intended use of block grant funds and public hearings are generally required to facilitate comments from interested local governments and persons. In areas such as lead-based-paint poisoning prevention, State and local public health officials have a knowledge of local needs which cannot be matched in Washington or even Atlanta.

The law requires each State to submit an annual report on its activities under the MCH block grant. The Department has requested that these reports be submitted by March 1983. It is expected that the States will include descriptions of activities of their lead-based-paint programs. As the Secretary testified before the Committee on Energy and Commerce on September 20, depending on the contents of these reports, we will decide if we have to reinstitute more formalized procedures for data retrieval.

In the meantime, the Health Resources and Services Administration and CDC will continue to maintain a focus of Federal expertise in lead poisoning prevention activities. Both the blood lead and erythrocyte protoporphyrin proficiency testing programs will continue. When requested, technical assistance will be provided to the States and, through them, to local communities. The CDC will continue to receive, analyze, and disseminate those reports that are voluntarily submitted by the States and local programs. We will continue to encourage all child health programs to screen children for lead toxicity and to provide the necessary medical and environmental intervention.

There is a repository of expertise in many of the States to deal with this problem. The laboratory network and the instrumentation for identifying lead hazards remain in place. With this continued technical assistance and encouragement, and the block grant funds which are now available to the States, we anticipate lead screening efforts will continue, particularly among those groups who are at highest risk.

Mr. Chairman, this concludes my formal remarks, and I will be happy to try to respond to questions.

[Dr. Hardy's prepared statement follows:]

TESTIMONY BY

DR. GEORGE E. HARDY, JR.

ASSISTANT DIRECTOR/WASHINGTON

CENTERS FOR DISEASE CONTROL

Mr. Chairman and Members of the Subcommittee:

I am Dr. George E. Hardy, Jr., Assistant Director/Washington of the Centers for Disease Control (CDC). I am pleased to be here today to discuss the important issue of childhood lead poisoning prevention, and to review what the Department of Health and Human Services (HHS) has done about this problem and what it proposes to do in the future.

Lead is an important chemical element which has been used since at least 2500 B.C. The Romans used more than 60,000 tons of lead per year for over 400 years, for, among other things, lining their aqueducts. According to some historians, lead poisoning was endemic in ancient Rome. Between 1940 and 1977, the annual use of lead in the United States almost doubled from 782,000 tons to 1.5 million tons. Between 1935 and 1977, the amount of lead used as a gasoline additive in the United States increased sixfold from 37,000 tons to 233,000 tons per year. Since 1977, the use of lead in gasoline has decreased significantly as gasoline additive regulations have been implemented.

Our knowledge of lead toxicity dates back at least 2000 years. The problem of lead toxicity in children first drew attention as congenital lead

poisoning in the eighteenth and nineteenth centuries. The occurrence of lead poisoning in children through direct exposure was first reported in Queensland, Australia, in 1892. The source of lead in these children remained a mystery until 1904 when lead paint was implicated. In 1943, Drs. Lord and Byers demonstrated the devastating effects (i.e., poor school performance and overt mental retardation) of lead poisoning on the brains of young children. In the 1950's and 1960's, hospitals in a few large cities such as Boston, New York, Chicago, Philadelphia, and Baltimore began systematically to screen high risk children for lead poisoning. In 1979, Dr. Herbert Needleman, then with the Boston Children's Hospital, demonstrated the adverse effects of low dose lead exposure. These effects include poor academic performance and behavorial problems.

There are many sources of lead in the environment. These include water, air, and food as background contributors. The usual high dose sources are lead in paint and lead in dust and soil. The lead in dust and soil derives from lead in paint, lead from automobile and industrial emissions, and from previous land use. Young children absorb about 4 times more lead per unit ingested than adults, and the developing brain is very sensitive to the effects of lead.

In 1970, the Surgeon General issued a statement which focused attention on prevention of childhood lead poisoning. The Congress gave support to this

effort by enactment of the Lead Based Paint Poisoning Prevention Act (P.L. 91-695) which was signed in January, 1971. The act was extended and amended in 1973 by P.L. 93-151, in 1976 by P.L. 94-317, and again in 1978, when screening provisions were incorporated into section 316 of the Public Health Service Act by P.L. 95-626. As implemented, the amended Act basically provided a screening program for high risk children under the direction of the Department of Health and Human Services (and the predecessor Department of Health, Education, and Welfare); it also directed the Department of Housing and Urban Development (HUD) to eliminate hazards of lead based paint poisoning in houses it owned or assisted financially; limited the maximum lead content allowable in residential paint to 0.06% by weight; and prohibited the application of lead based paint to cooking, eating, and drinking utensils, and toys and furniture.

Since 1972, this Department has provided financial and technical assistance to States and communities for establishing programs to screen and identify children with lead toxicity and to provide the necessary medical and environmental interventions. Childhood lead toxicity is <u>not</u> equally distributed geographically, and grant funds were provided to those areas of greatest need. Over the years, categorical grant funds totaling approximately $90 million have been provided to more than 100 communities in 35 States and the District of Columbia.

The Lead Based Paint Poisoning Prevention Programs supported by HHS were designed with several interlocking program elements to ensure their success. These elements were:

- o The screening of high risk children.
- o The establishment of community education and outreach efforts.
- o The development and maintenance of laboratory analytic capabilities.
- o The assurance of appropriate medical care and followup for those found at risk of lead toxicity.
- o The conduct of appropriate investigation and intervention in the environment of any child found to have lead toxicity, to identify and remove the sources of high dose lead hazard from the environment of that child.

Since 1972, States and local childhood lead poisoning prevention programs have screened more than 4 million high risk children and identified over 250,000 (6%) with lead toxicity. The programs identified lead hazards in 165,000 dwellings and eliminated those hazards in 112,000. CDC initially provided the necessary training and equipment to establish laboratory

competence for accurately measuring blood lead. There are now over 100 laboratories which maintain that competence through proficiency testing programs and laboratory consultations. When the initial laboratory test of choice was changed from analysis of blood lead to erythrocyte protoporphyrin, CDC transferred that technology through grant funds and its laboratory training efforts and developed proficiency testing for over 200 laboratories in approximately one year.

CDC also assisted other Federal agencies, such as the Health Services Administration (HSA) and the Health Care Financing Administration (HCFA) within HHS, as well as other Federal Departments such as HUD and the Department of Agriculture, to develop and implement priority lead poisoning prevention activities. Both HSA and HCFA actively encouraged programmatic activities within the States. HUD developed the technology to accurately measure lead in paint on the walls of houses. Although the problem of pediatric lead toxicity has not been solved, program reports indicate that it has been markedly reduced. For example, in 1973, 11.1% of children screened in high-risk project grant areas were identified with lead toxicity; whereas in 1981, only 4.1% of those screened were found to have the disease. In addition, the number of children being found with extremely high blood lead levels has been greatly reduced, and death and overt encephalopathy from this disease have become a rarity.

The recently completed second National Health and Nutrition Examination Survey (NHANES II) shows that the problem of lead toxicity in children is greater than previously anticipated. The NHANES II Survey is based on a complex sampling design that represents the noninstitutionalized population of the United States aged 6 months to 74 years. It showed that 4% of the children 6 months through 5 years of age had blood lead levels greater than 29 micrograms per deciliter of whole blood (the level of concern). Findings for specific groups include: children from inner cities of large urban areas--11.6%; children from smaller urban areas--3.5%; and children from rural areas--2.1%. The blood lead levels of black children are higher than those of white children, though in white children from relatively affluent families 0.7% were still found to have elevated blood lead levels.

Effective October 1, 1981, the grant funds for the childhood lead based paint poisoning prevention programs were consolidated by the Congress into the Maternal and Child Health Program block grant. Block grants constitute one of the key reforms of this Administration. A major purpose of the block grants is to achieve greater flexibility for the States in their use of Federal funds. With block grants, the States can tailor their spending to meet their own needs. Public notice of the intended use of block grant funds and public hearings are generally required to facilitate comments from interested local governments and persons. Bringing government decisions closer to those who are being served is one of the most important principles of block grants. In areas such as lead based paint poisoning prevention, State and local public health officials have a knowledge of local needs which cannot be matched in Washington.

The law requires each State to submit an annual report on its activities under the MCH block grant. The Department has requested that these reports be submitted by March of 1983. It is expected that the States will include descriptions of activities of their lead-based paint programs. As the Secretary testified before the Committee on Energy and Commerce on September 20, depending on the contents of these reports, we will decide if we have to reinstitute more formalized procedures for data retrieval.

The Health Resources and Services Administration and CDC will continue to maintain a focus of Federal expertise in lead poisoning prevention activities. Both the blood lead and erythrocyte protoporphyrin proficiency testing programs will continue. When requested, technical assistance will be provided to the States and, through them, to local communities. The CDC will continue to receive, analyze, and disseminate those reports that are voluntarily submitted by the States and local programs. We will continue to encourage all child health programs to screen children for lead toxicity and to provide the necessary medical and environmental intervention.

There is a repository of expertise in many of the States to deal with this problem. For example, Statewide programs were established in Maine, Rhode Island, South Carolina, Illinois, Wisconsin, Delaware, Arkansas, Louisiana, and the District of Columbia. In many other States, although Statewide programs were not implemented, there is expertise in the States and local areas to continue programs. The laboratory network and the instrumentation for identifying lead hazards remain in place. With this continued technical assistance and encouragement, and the block grant funds which are now available to the States, we anticipate lead screening efforts will continue, particularly among those groups who are at highest risk.

Mr. Chairman, that concludes my formal remarks. I will be happy to respond to your questions at this time.

Mr. WAXMAN. You mentioned in your statement the Secretary's testimony that HHS expects to receive reports on the MCH program in general and on the lead program in particular. What information has CDC or HHS requested from the States? What questions have you asked about the prevalence of lead poisoning in the States' lead screening program?

Dr. HARDY. The only information which we have received is that which has been voluntarily submitted. There has been no specific request for detailed information, which as you know, has been the philosophy for all the block grants. It is our expectation that we will receive reports, detailed reports about lead activities when the States report their activities, but there have been no specific requests.

Mr. WAXMAN. How are we going to know whether the States are using Federal dollars for any worthwhile purpose under the block grants, particularly this effort?

Dr. HARDY. One of the requirements is that the State must prepare and submit to the Secretary a report describing the intended use of the payments the States will receive, including a description of the population areas and localities identified as needing MCH services—which would include the lead-based-paint prevention program—a statement of the State's goals and objectives for meeting these needs, information on the types of services to be provided, and the individuals to be served and the type of data that the State intends to collect respecting activities conducted with such payments. That is a statutory requirement. We expect that under that requirement we will receive data that can be reviewed.

Mr. WAXMAN. Of course the Secretary seemed to indicate we would have a little bit more information than that, but what you just indicated, was that done this year? Are these statements ever rejected?

Dr. HARDY. In the first year of block grant awards, because of the timeframe in which the blocks were enacted, the provisions for public comment and the provisions for State legislative hearings were not in fact required. There was no way the block grant funds could have been parceled out in timely fashion if that requirement had been instituted. It will be a requirement of all future years.

Mr. WAXMAN. You say that CDC will continue to maintain a focus on lead poisoning. How much money did you request in 1983, and how much was spent in 1981?

Dr. HARDY. The in-house CDC lead program consisted of 10 people, and a budget of approximately $500,000 in fiscal year 1982. There was not a request for the continuation of those individuals and that money for fiscal year 1983.

Mr. WAXMAN. At all?

Dr. HARDY. That is correct. The House Appropriations Committee did in fact put those positions and moneys back in the bill that was adopted yesterday by the House.

Mr. WAXMAN. Do you think that CDC would have a difficult time maintaining a Federal focus without any employees dealing with the subject matter?

Dr. HARDY. These employees are people who will be moved to other program responsibilities within the Center for Environmental Health. There is no question of their interest in the lead pro-

gram, and every effort would be made by these people who have the competence to respond to requests for assistance to do so. They would be responsible for other primary program activities as well.

Mr. WAXMAN. You say that you will provide technical assistance to the States. How much money did the administration request for technical assistance activities regarding lead for 1983, and how much was spent for 1981?

Dr. HARDY. There was no specific request for technical assistance activities in 1983. Under each of the block grants there is the capability to provide technical response, limited technical response to requests from States, and that would have been carried out in fiscal year 1981 and 1982 by the individuals we just spoke of, and in fiscal year 1983 by whatever capability they could offer through the Center for Environmental Health.

Mr. WAXMAN. I am curious to know how administratively you take people out of an area in which they are involved because you do not have money for them. You claim they will be working somewhere else at CDC, but they will still be working on lead paint?

Dr. HARDY. Not primarily. They will be working within the Center for Environmental Health, and obviously lead-based paint is an environmental problem. They would be filling position vacancies which have occurred over the year through attrition in the Center so the particular "lead" positions would not exist. Their principal responsibilities would be the broad range of environmental health, but as I indicated, they would certainly attempt to respond to requests in the lead-based-paint area.

Mr. WAXMAN. Dr. Hardy, we appreciate your testimony, and the new position you have in relationship to us at a hearing such as this. We are going to break and Mr. Johnson, we will return as soon as we have the opportunity to vote and get right back here.

[Brief recess.]

Mr. WAXMAN. Our next witness is Mr. Kirk Johnson, assistant director of the National Coalition for Lead Control. We are pleased to have you with us today. Your prepared statement and the coalition's report on this matter will be made a part of the record, and I ask that you summarize your statement for the subcommittee.

STATEMENT OF KIRK A. JOHNSON, M.S., ASSISTANT DIRECTOR, NATIONAL COALITION FOR LEAD CONTROL, CENTER FOR SCIENCE IN THE PUBLIC INTEREST

Mr. JOHNSON. Thank you, Mr. Chairman, I would be glad to. We represent a collection of 30 national and local organizations that are dedicated to eliminating lead hazards, including the National Urban League, National Education Association, Friends of the Earth, and Children's Foundation. The coalition is coordinated by the Center for Science in the Public Interest, a non-profit consumer advocacy group have here in Washington.

Last year Health and Human Services Secretary Schweiker testified before this subcommittee about block grants and in doing so promised that block grants would streamline the delivery of lead-screening dollars to local health programs to the extent that 25 percent could be safely pared off the top of Federal funding with no loss in services. After the first year of the block grant, our coalition

decided to test this theory. We spoke with health officials in the 10 cities with the most severe lead problems to survey the extent to which the switch to block grants had hurt their ability to identify and provide medical care for children with high blood lead levels. With your consent, Mr. Chairman, I ask that our report be entered into the record.

Mr. WAXMAN. Without objection. [See p. 37.]

Mr. JOHNSON. We have summarized our findings on the chart that I have before me now. On this chart are figures for the average operating budgets of the local lead screening programs in the cities that we surveyed, and the average number of children screened for lead poisoning for 3 years: fiscal year 1981, the last categorical year; fiscal year 1982, the first year of the block grant; and projections for fiscal year 1983, the current year.

The effect of the block grant has been severe. During the first year of the block grant, average operating budgets for screening programs have declined 10 percent. With fewer operating dollars for these programs, staff reductions have been rife. Indeed, in the cities we surveyed, staff cuts of 20 to 50 percent were not uncommon, and with fewer people to run the programs, fewer staff people to go to high-lead neighborhoods, canvass for high-lead children and test them, you can imagine the ultimate brunt of these reductions has been felt by the children.

In the first year of the block grant the average number of children screened dropped from 14,500 children to 13,000. That again is a drop of 10 percent. The health officials that we have spoken with in these cities claim that the reason for these reductions in operating budgets and children screened is a 25-percent cutback because of the switch from categorical to block grants.

Indeed, the situation for the next fiscal year does not look much better. These health officials are projecting that by the end of this fiscal year, operating budgets for screening programs will have fallen by 35 percent, and the number of children screened for lead poisoning will fall by 50 percent. In other words, by the end of this fiscal year, half the children who would have received screening under the old categorical funding system will not receive screening because of the block grant. We do not have to wait another year to know that the block grant approach has failed lead screening programs. In our opinion if this subcommittee and Congress act now, they can prevent the severe second-year budget cutbacks and screening cutbacks that these health officials are forecasting.

Our coalition has five recommendations: First, we ask that Congress remove lead-based poisoning prevention programs from the maternal and child health block grant and reestablish their categorical status. This is the only way that Congress can insure that the Federal health dollars that you appropriate reach the high-lead youngsters for whom they are intended.

The childhood lead poisoning is primarily, although not exclusively, an urban problem. Yet some cities with the most severe lead problems are located in States whose rural-dominated legislatures are less sensitive to urban concerns. We believe that even in States that are well attuned to the importance of lead control, shrinking State budgets and pressure to reduce spending may induce decisionmakers to funnel these precious health dollars elsewhere.

14-591 O - 83 - 3

Second, Congress should sharply increase the budget for lead-screening programs above and beyond the 25-percent cutback that has been imposed by the Reagan administration. Figures show that lead screening is both cost-effective and efficient. Yet no matter how good the program, its ultimate impact has been limited by appropriations that have been quite modest. You can see this by comparing the number of children who receive care for lead screening with the numbers who need it. Despite the efficiency of the program and despite its concentration on screening kids from high-risk urban neighborhoods, only about 3 percent of the high-lead children in the Nation can be found and cared for each year by the Federal screening effort. Clearly, more generous appropriations are in order.

Third, we recommend that the mandate for the lead screening programs in the Lead-Based Paint Poisoning Prevention Act be expanded from focusing on the hazards of lead-based paint to encompass other sources of lead. In the years since the act was passed, health officials have been increasingly aware that, although old lead-based paint in inner-city buildings remains the basic source of lead for a sizable number of youngsters, the diet, soil, water supply, and air together comprise the major source for others. While exposure to these sources is clearly not always avoidable, informed parents can take steps to limit their children's exposure to lead from canned foods, soil, dust on building surfaces, newspaper and magazine inks, toys, and other contaminated materials. These avoidable sources can contribute a significant fraction of many individuals' daily lead intake. We believe that a broader mandate in the act would encourage local lead-screening programs to incorporate information on non-paint sources in their educational work. Some programs have already done this. Such a mandate would also avoid overemphasis on lead-paint removal.

Fourth, Congress should reinstate the Centers for Disease Control as the agency responsible for administering the Nation's lead screening effort. CDC's experience and its technical expertise are shared by no other Federal body. Contrary to administration claims that we heard this morning, many local officials rely heavily on CDC's training programs, technical advice, and help with laboratory problems. And they consider CDC's recordkeeping and reporting requirements a valuable way for them to judge their own program's progress and to keep track of national trends.

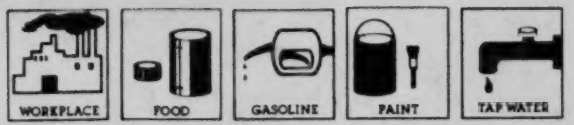
Finally, Congress should allow States to establish programs of consultation and support services to help local health departments start and maintain lead-screening programs. Before 1981 State governments were generally prevented from dispersing Federal grant dollars by a provision in the act. I believe it was the first section of the act. This provision had mixed effects. Certainly direct funding was more efficient than channeling Federal health dollars from CDC through States to local health departments. But by denying States control over the purse strings for local screening efforts, direct funding also made these State governments powerless to begin lead-screening programs in communities that needed them or to coordinate existing programs. We believe that States with a genuine interest in promoting lead control should be allowed to form a partnership with CDC and local health departments. We

recommend that the option of forming these statewide programs of consultation and support be extended to each State, and that CDC be instructed to review and approve or deny each State's application for establishing such a system.

In sum, we believe the block grant approach has done much more harm than good, and urge the Congress to restore lead-screening programs to their previous good health by granting the programs categorical status by increasing funding, by giving the programs a mandate to address nonpaint sources of lead, by reinstating CDC's authority over the program, and by allowing States a greater role in planning and coordinating local lead-screening efforts. I would be happy to answer any questions that you have.

[Testimony resumes on p. 54]

[Mr. Johnson's prepared statement and report follow:]



The National Coalition for Lead Control

Statement of Kirk A. Johnson, M.S.
Assistant Director, National Coalition for Lead Control
Center for Science in the Public Interest
before the
Subcommittee on Health and the Environment
U.S. House of Representatives
December 2, 1982

Mr. Chairman, members of the subcommittee, my name is Kirk Johnson. I am assistant director of the National Coalition for Lead Control, a collection of thirty national and local health, environmental, minority, urban and children's advocacy organizations that are dedicated to eliminating lead hazards. The Coalition includes such groups as the National Education Association, Friends of the Earth, the National Urban League, Children's Foundation, and the National Medical Association, and is co-ordinated by the Center for Science in the Public Interest.

The Coalition was formed because of warning signs that this nation may soon witness a marked rise in the number of children suffering from lead-related health problems, without the protection of vital programs to deal with this hazard. Before 1981, the federal government had made commendable progress in reducing lead emissions into the environment and in diagnosing and treating children with excessive lead exposures. But the ascendance of the Reagan Administration brought a wholesale attack on the regulations and programs that protect Americans from lead.

Shortly after Mr. Reagan took office, the White House directed the Environmental Protection Agency to propose a relaxation of controls over lead levels in leaded gasoline, regulations that have been credited with much of a 35% decline in Americans' blood lead levels between 1976 and 1980.[1] The Occupational Safety and Health Administration subsequently announced it was "re-evaluating" the "feasibility" of a Carter Administration proposal to reduce worker exposure to airborne lead by 75%.[2] We recently learned that OSHA is considering replacing its controls on lead levels in workplace air in favor of measures that would take effect only after workers' blood levels rose--a proposal reminiscent of canaries being sacrificed as an indicator of toxic gas build-up in mines. The Food and Drug Administration has thus far delayed implementation of any regulations that would restrict lead levels in the food supply, despite the fact that the average consumer receives most of his or her daily lead intake from the diet,[3] and despite FDA and industry studies documenting the potential hazard from lead in food.[4]

Compounding the risk created by regulatory changes that will increase everyone's exposure to lead, the Administration has also meddled with the programs that help care for individuals after their lead burdens become excessive.

Center for Science in the Public Interest • 1755 S St., NW • Washington, D.C. 20009
Bambi Batts Young, Ph.D., Director

By folding money for the nation's lead-based paint poisoning prevention (lead screening) programs into the Maternal and Child Health block grant, and reducing overall funds for the block by one-quarter, the Reagan budget is gradually crippling the federal government's only mechanism for systematically identifying and providing medical care for high-lead youngsters. In a recent survey[5] of the ten cities with the most severe lead problems, the National Coalition for Lead Control found that during the first year under the block grant (FY 1982), the 25% reduction in funds was translated to an average 10% cut in the operating budgets of lead screening programs. With fewer operating dollars, staff reductions of 30-50% were rife.

Of course, the impact of the budget and staff cuts was ultimately borne by the children. Ten percent fewer children were screened for lead poisoning in the first year of the block grant compared to the last year of categorical funding. This represents over 10,000 children in the ten surveyed cities alone who did not receive adequate medical care.

For the second year under the block grant (FY 1983), most health officials are predicting even more severe reductions in screening and treatment. This is because most states initially exercised a special first-year option to receive their reduced federal block funds in the same proportion as under categorical grants. Thus, a lead screening program that had received 6% of all dollars given to maternal and child health activities through categorical grants continued to receive 6% of the reduced block grant dollars. But during FY 1983, all health programs in the Maternal and Child Health block will compete with each other for the shrunken block grant pool. The political impotence of the low-income children and families who form the principal constituency for lead screening has prompted health officials in the cities we surveyed to forecast a 35% reduction in operating budgets, and a 50% reduction in children screened, compared to the last categorical year. Mr. Chairman, I ask that the Coalition's report on these trends be entered into the record.

These grim statistics fly in the face of the Administration's confident promises about how the block grant would streamline the delivery of health dollars without cutting back services. On March 26, 1981, Health and Human Services Secretary Richard Schweiker testified before this subcommittee that block grants would improve the efficiency of lead screening and other programs by reducing administrative costs to such an extent that a 25% cut in total spending for the block could be absorbed with no loss in services.[6] Evidently, the Administration chose to ignore analyses by the Congressional Budget Office[7] and the General Accounting Office[8] showing that administrative costs of a typical categorical program consume only about 4-5% of the total grant; that the cost of administering the typical block grant is about the same as categorical grants; and that block grant programs can actually have higher administrative costs than categorical programs. Indeed, when pressed to justify that the 25% cut would not endanger services, Secretary Schweiker could produce only a "personal opinion" from the director of Missouri's Division of Health that his office could do a better job without the one-quarter of his staff that implemented the federal categorical grants. We find it ironic that because of the block grant, 38 of 75 staff members were fired from the St. Louis lead screening program last year, and screenings fell from 14,000 to barely 10,000.

We do not have to wait another year to know that the block grant approach has failed for lead screening programs. If Congress acts now, it can prevent

the severe second-year budget and screening cutbacks that are being forecast. Here are the National Coalition for Lead Control's recommendations:

First, we ask that Congress remove lead-based poisoning prevention programs from the Maternal and Child Health block grant and re-establish their categorical status. Only by restoring categorical allocation can Congress insure that federal health dollars reach the high-lead youngsters for whom they are intended. Childhood lead poisoning is primarily, though not exclusively, an urban problem. Yet some cities with the most severe lead problems are in states whose rural-dominated legislatures are less sensitive to urban concerns. Even in states that are attuned to the importance of lead control, shrinking state budgets and pressure to reduce spending may induce decision makers to funnel health dollars elsewhere.

Second, Congress should sharply increase the budget for lead screening programs, and should do so above and beyond the 25% reduction imposed by the Reagan Administration. The federal lead screening effort is both cost-effective* and efficient**. Yet no matter how good the program, its ultimate impact has been limited by modest federal appropriations. Since 1972, Congress has appropriated less than half the funds it has authorized for lead screening.[11] The need for additional dollars can be shown by examining how many of the children who need screening actually receive it. Over a half million young children nationwide presently have too much lead in their bodies.[10] Despite the efficiency of the lead screening program and its concentration on screening children from high-risk urban neighborhoods, only about 3% of the high-lead children in the nation can be found and cared for each year with federal screening dollars.[11,13] More generous funding is clearly in order.

Third, we recommend that the mandate for the lead screening programs provided by the Lead-Based Paint Poisoning Prevention Act, which focuses on the hazards of lead-based paint, be expanded to encompass other sources of lead.

---

* For example, in 1978, the federal budget for all lead screening programs was $8.5 million. For the same year, the social costs of excessive childhood lead exposure, in terms of medical care and special education for all high-lead children, and (later) lost adult wages, were conservatively estimated to be $1 billion.[9] Of the approximately 670,000 youngsters nationwide who in 1978 had too much lead in their bodies,[10] the federal lead screening programs provided screening and treatment for about 3%,[10,13] so the social cost of lead exposure for the children under the care of screening programs can be estimated at 3% of $1 billion, or $30 million. Thus, in purely economic terms, lead screening makes sense; the cost of screening is lower than the cost of not screening by a factor of about 3-to-1. It is impossible, of course, to quantify the human suffering prevented by lead screening programs.

** From 1972 to 1980, the federal lead screening program identified and provided medical care for over 170,000 high-lead youngsters[12] at a total cost of $75 million.[11] Thus, early intervention by lead screening centers has meant that thousands of youngsters have been protected against potentially permanent mental deficits and behavioral problems at an average cost per high-lead child of only $440.

In the years since the Act was passed, health officials have grown more and more aware that, although old lead-based paint in inner-city buildings remains the principal source of lead for a sizable number of youngsters, the diet, soil, water supply, and air together comprise the major source for others. While exposure to these sources is clearly not always avoidable, informed parents can take steps to limit their children's exposure to lead from canned foods, soil, dust on building surfaces, newspaper and magazine inks, toys, and other contaminated materials. These avoidable sources can contribute a significant fraction of many individuals' daily lead intake.[3] A broader mandate in the Act would encourage local lead screening programs to incorporate information on non-paint sources in their educational work (some programs have already done so), and would avoid overemphasis on leaded paint removal.[14]

Fourth, Congress should reinstate the Centers for Disease Control as the agency responsible for administering the nation's lead screening effort. CDC's experience and technical expertise are shared by no other federal body, including HHS's Division of Maternal and Child Health, which currently administers the Maternal and Child Health block grant. Many local officials rely heavily on CDC's training programs, technical advice, and assistance with laboratory problems, and consider CDC's reporting and recordkeeping requirements valuable tools to gauge the progress of their own programs and to track national trends. The Administration's distancing of CDC from local lead screening activities represents a triumph of political expedience over common sense, and should be rectified.

Finally, Congress should allow states to establish programs of consultation and support services to help local health departments start and maintain lead screening programs. Before 1981, a provision of the Lead-Based Paint Poisoning Prevention Act prevented state governments from taking charge of the disbursement of federal grant dollars unless a state ordinarily provided direct services to local communities or where local health departments were prohibited by law from receiving federal funds directly. This provision had mixed effects. Direct funding was more efficient than channeling federal dollars from CDC through state governments to localities; it meant no grant dollars were used to administer the categorical program at the state level. But by denying states control over the purse-strings for lead screening, direct funding also made state governments powerless to begin lead screening programs in new communities or to coordinate and otherwise serve existing programs. We believe states that have a genuine interest in promoting lead control should be allowed to form a partnership with CDC and local health departments. We recommend that the option of forming state-wide programs of consultation and support be extended to each state, and that CDC be instructed to review, and to approve or deny, each state's application for establishing such a system.

In sum, we believe the block grant approach has done much more harm than good, and urge the Congress to restore lead screening programs to their previous good health by granting the program categorical status; by increasing funding; by giving the programs a mandate to address non-paint sources of lead; by reinstating CDC's authority over the program; and by allowing states a greater role in planning and coordinating local lead screening programs.

I would be happy to answer any questions you may have.

NOTES

1. Centers for Disease Control, Morbidity and Mortality Weekly Report, March 19, 1982.

2. 46 Federal Register 22,764.

3. National Academy of Sciences, Lead in the Human Environment, 1980.

4. Schaffner, R., Lead in Canned Foods, Food Technology, December 1981; The Nutrition Foundation, Assessment of the Safety of Lead and Lead Salts in Food, June 1982.

5. National Coalition for Lead Control, Children, Lead Poisoning, and Block Grants: A Year-End Review of How Block Grants Have Affected the Nation's Ten Most Crucial Lead Screening Programs, October 1982.

6. Schweiker, Richard S., in Hearings before the Subcommittee on Health and the Environment, Committee on Energy and Commerce, U.S. House of Representatives, March 26, 1981.

7. Congressional Budget Office, An Analysis of President Reagan's Budget Revisions for Fiscal Year 1982, U.S. Congress, March 1981.

8. General Accounting Office, Lessons Learned from Past Block Grants: Implications for Congressional Oversight, September 23, 1982.

9. Provenzano, G., The Social Costs of Excessive Lead Exposure During Childhood, in Low-Level Lead Exposure: The Clinical Implications of Current Research, H. Needleman, ed., Raven Press, 1980

10. Mahaffey, K., et al., National Estimates of Blood Lead Levels: United States, 1976-1980, New England Journal of Medicine, 307:10, September 2, 1982.

11. Bailey, S., Legislative History of the Lead-Based Paint Poisoning Prevention Program, Congressional Research Service, September 28, 1982.

12. Houk, V., Implications of Newer Data for Screening and Evaluation of Children, in Low-Level Lead Exposure: The Clinical Implications of Current Research, H. Needleman, ed., Raven Press, 1980.

13. Centers for Disease Control, Morbidity and Mortality Weekly Report, March 12, 1982 and February 13, 1981.

14. The Coalition has learned of one lead screening program that has removed leaded paint from homes regardless of whether a high-lead child resides within, while failing to look for children whose high lead levels are caused by non-lead scources. In another state, when investigators from a local screening program are dispatched to a high-lead child's home to locate the source(s) of lead, they look first for leaded paint. If it is found, the paint is removed and the investigation stops. No other sources are investigated, even though canned foods, magazines, toys, and other materials may be contributing to the child's unsafe lead levels.

Children, Lead Poisoning, and Block Grants

A Year-End Review of How Block Grants Have Affected the Nation's Ten Most Crucial Lead Screening Programs

October 1982

National Coalition for Lead Control
Center for Science in the Public Interest • 1755 S St. NW • Washington, DC 20009 • (202) 332-9110

Executive Summary

In mid-1981, Congress, at the urging of the Reagan Administration, folded funds for childhood lead screening programs into the Maternal and Child Health block grant and reduced funds for the block by 25%. Block grant proponents argued that this new funding mechanism would improve efficiency and result in no loss of health services. However, a year-end review shows that the block grant significantly impaired the ability of key lead screening programs to identify and care for children with dangerously elevated lead levels. Under the first year of the block grant, the budgets of these programs were reduced an average of 10%; the number of children screened for lead poisoning also fell by 10%. Health officials forecast even more drastic budget cuts (-35%) for the second year of the block grant, with a subsequent reduction in children screened (-55%) and treated for lead problems.

A Persistent Public Health Problem

For centuries, man has recognized that lead can wreak havoc upon the fine workings of the human body. Historians have linked the fall of the Roman Empire to consumption of wine made in leaden vessels; Benjamin Franklin wrote a celebrated letter on lead, lamenting the repeated poisonings that were taking place in his day despite lead's reputation as a toxin.

In modern times, Americans have come to associate lead poisoning with urban decay. Many of us can remember pictures of sick and dying ghetto children in the early 1970s, victims of leaded paint chips that flaked off tenement walls. (Children are particularly vulnerable to lead, both because they absorb more of the

metal than adults, and because their young bodies are still developing.)

Today, years after health officials began to correct many leaded-paint hazards in old buildings, most Americans assume lead is no longer a problem. But it is. A recent survey by the U.S. Department of Health and Human Services (HHS) revealed that 4% of all young children nationwide--over 600,000 youngsters--are contaminated with too much lead.(1) This means that lead affects more children than measles, mumps, rubella, and every major childhood disease combined.(2)

The HHS survey also revealed that lead hits some groups disproportionately hard. Dangerous lead levels were found among 11% of all poor children, 12% of black children, and a full 18% of inner-city black children.(3) Scientists suspect these statistics may reflect exposure to greater amounts of lead (as from breathing city air full of leaded auto exhaust) and poorer nutrition (a good diet helps the body counteract lead).

For most children, these lead levels are not life-threatening. Nevertheless, even low-level contamination can place a child at risk for a staggering array of subtle learning problems and behavioral disorders. In a 1979 study at Harvard Medical School, schoolchildren with higher lead levels scored lower on IQ tests, and were consistently rated by their teachers as more distractible, less able to follow simple instructions, more easily frustrated, and overall poorer performers than their classmates with less lead.(4) This landmark study was later confirmed by researchers in Britain and Germany.(5)

The higher lead levels found in these children correspond approximately to the levels discovered, through the HHS survey, to be contaminating hundreds of thousands of children nationwide. Thus, without adequate medical care, a substantial proportion of the next generation risks growing up burdened with a set of subtle, but permanent, mental handicaps.

Lead Screening Programs in Brief

Fortunately, a mechanism does exist for correcting lead problems in children: lead screening programs. Since 1971, over fifty federally funded, locally operated lead screening programs have tested millions of children for dangerous lead levels. Children found through a blood test to have too much lead are detoxified through drug treatment at a hospital. In addition, health investigators are dispatched to the children's homes to help remedy any household sources of lead (for example, peeling lead paint on walls) and to educate parents on how their children can best be protected from further exposure.

Lead screening is remarkably cost-effective. The programs cost the federal government about $11 million annually. Yet the cost of lead exposure, in terms of special education and medical care for lead-damaged children, plus lost adult wages, has been estimated at $1 billion per year.(6) An ounce of prevention is truly worth a pound of cure.

Categorical Grants Become Block Grants

Cities have historically received funding for lead screening through federal categorical grants earmarked specifically for these programs. But in the summer of 1981, Congress, at the urging of the Reagan Administration, folded lead screening with a number of other preventive health programs* into a large Maternal and Child Health block grant.

This action made two profound changes in how lead screening programs were funded. For the first time in history, states were given the authority to decide how much money--if any--would go to the various programs in the block grant, a move designed to increase each state's autonomy over its own activities. To ease the transition to the block grant, states were allowed a first-year option of receiving funds for the programs in the block grant in the same proportion as under the previous categorical grant. Thus a health program receiving 12% of a state's health funds under the old categorical grant could still receive 12% of the new block grant money.

In addition, whether or not states chose to exercise their option to preserve relative funding levels, overall funding for the block grant was reduced by approximately 25%. This reflected the view that returning control to the states would allow federal overhead costs to be deducted from the grants with no loss in services.

Measuring the Impact of Block Grants

Architects of the block grant reasoned that the new funding mechanism would allow each state to direct its share of federal dollars to the programs it deemed most important, and that reducing total funding by one-quarter would not affect

---

* Maternal and Child Research, Services, and Training; Sudden Infant Death Syndrome Information and Counseling; Hemophelia Diagnostic and Treatment Centers; Genetic Disease Testing and Counseling Services; Adolescent Pregnancy Prevention Services; and Disabled Children Programs.

the delivery of services. We tested this theory by examining the impact of the Maternal and Child Health block grant on 10 of the nation's 52 major lead screening programs one year after after the transition. These programs were selected because the cities in which they operate have the most severe lead problems of any in the United States: (7)

Rank	City	Positive Screens*
1	New Jersey (other local programs)	23.7%
2	Newark, N.J.	14.1%
3	St. Louis, Mo.	11.8%
4	Jersey City, N.J.	11.3%
5	Philadelphia, Pa.	10.8%
6	Atlantic City, N.J.	9.6%
7	Paterson, N.J.	8.9%
8	Monroe County (Rochester), N.Y.	6.6%
9	Cleveland, Ohio	6.5%
10	Chicago, Ill.	6.3%

* The positive screen rate is the percentage of children screened who are found to need medical care for too much lead. The national median positive rate is 2.3%. (8)

Lead screening programs in two areas--Atlantic City, N.J. and "other local programs" in New Jersey--were excluded from the analysis because their funds are provided exclusively by local sources. To measure the effects of the switch to the block grant for the remaining eight programs, we collected statistics on total funding levels; numbers of children screened for lead poisoning; staff size; and overall ability to provide follow-up care. Information from the last year in which screening was supported by categorical grants (fiscal year 1981) was compared to figures from the first year under block grants (FY 1982) and projections for the following year (FY 1983).

Results

Although the block grant has been in place for a full year, for many states it is still too early to gauge the full impact on lead screening programs: virtually every state exercised its special first-year option to receive reduced federal funds in the same proportion as in previous years. A truer test of the political popularity of lead screening will come during the second year of the block grant, when all seven programs in the Maternal and Child Health block will compete for reduced federal dollars.

Our analysis did reveal, however, that the 25% cut in federal funds alone has substantially reduced the ability of crucial lead screening programs to provide adequate services. Contrary to the predictions of block grant proponents, the federal funding cut has been reflected in shrunken budgets for local lead screening programs, resulting in subsequent reductions in staff, screenings, and follow-up care.

Cutbacks in budgets for lead screening programs

During the first year of the block grant, all lead screening programs surveyed had federal budget cuts offset to some degree by increased state or local funds. Nevertheless, program budgets for the first year under the block grant (FY 1982) averaged 10% lower than under the last year of the categorical grant (FY 1981). Programs in 5 of the 8 cities suffered major budget reductions. Budgets for the second year of the block grant (FY 1983) have been projected to be reduced even more--an average of 35% lower than previous categorical levels. See Table 1.

TABLE 1

FUNDING LEVELS FOR LEAD SCREENING PROGRAMS

	FY 1981 Categorical Grant	FY 1982 Block Grant	Percent Change from FY 81	FY 1983 Block Grant (Estimated)	Percent Change from FY 81
Newark, N.J.	$ 356,238	$ 273,402	-23%	$ 190,000	-47%
St. Louis, Mo.	1,100,000	905,000	-17%	800,000	-27%
Jersey City, N.J.	143,127	120,000	-16%	75,000	-47%
Philadelphia, Pa.	515,000	515,000	0%	(unavailable)	--
Paterson, N.J.	161,000	122,000*	-24%	Reduced funds expected	At least 24%
Monroe Co., N.Y.	244,997	251,591	+12%	(unavailable)	--
Cleveland, Oh.	202,000	170,000	-16%	109,000	-46%
Chicago, Ill.	425,000	425,000	0%	331,000	-22%
		Average:	-10%		-35%

* Estimated.

All figures reflect total budget dollars (federal, state, and local combined). New Jersey and New York figures are for calendar years.

Cutbacks in identifying high-lead children

These budget cuts have also greatly diminished the ability of programs to identify children who have lead problems. In the 8 cities surveyed, the number of children screened for lead poisoning declined an average of 10% from FY 1981 to FY 1982. This represents over 10,000 youngsters who have been denied screening under the block grant. The majority of health officials forecast even more severe reductions in screening for FY 1983. According to these projections, over 50% of the children who would have been screened for lead under categorical funding will not receive these services in FY 1983. See Table 2.

TABLE 2

CHILDREN SCREENED FOR LEAD POISONING

	FY 1981 Categorical Grant	FY 1982 Block Grant (Estimated)	Percent Change from FY 81	FY 1983 Block Grant (Estimated)	Percent Change from FY 81
Newark, N.J.	8,423	8,000	-5%	300	-96%
St. Louis, Mo.	14,000	10,000	-28%	5,000	-64%
Jersey City, N.J.	3,922	4,000	+2%	1,000	-75%
Philadelphia, Pa.	21,005	22,000	+5%	less than 25,000	--
Paterson, N.J.	4,298	3,000	-30%	2,500	-42%
Monroe Co., N.Y.	5,600*	5,600	0%	(unavailable)	--
Cleveland, Oh.	14,000	12,700	-9%	11,300	-19%
Chicago, Ill.	45,000	40,000	-11%	30,000	-33%
		Average:	-10%		-53%

* Estimated.

New Jersey and New York figures are for calendar years.

Lead screening programs have usually been able to screen only a fraction of the children who risk developing lead problems. Upwards of 250,000 children in the 8 cities surveyed are young enough to fit this high-risk classification. Even under the categorical grant, only about 116,000 of these children were being screened for lead poisoning; the block grant has made the goal of screening every child who needs it even more elusive.

Cutbacks in follow-up care and staffing

The budget cuts have inevitably affected the care of children identified as having lead problems. The result: a reduction in follow-up services, including curtailment of medical care and visits to children's homes for parental education and reduction of lead hazards. A detailed city-by-city breakdown of changes in local funding, screening, follow-up, and staffing is given in the appendices.

Conclusion

The ability of health officials in key American cities to identify and care for children with dangerously elevated lead levels has been substantially reduced because of the transfer of funds for lead screening programs from a categorical grant to the Maternal and Child Health block grant. In the first year of the block grant (FY 1982), over 10,000 children who would have been screened for lead poisoning under the categorical grant did not receive this care. According to health officials, this reduction in services is directly attributable to a 25% funding cut that accompanied the switch to the block grant.

In future years, the detrimental effects of the block grant are likely to be even greater. During the first year of the block grant, most states accepted reduced federal funding for health programs in the same proportions as in previous years; lead screening funds were thus reduced but still earmarked for lead screening programs. Beginning with the second year of the block grant, all states will receive these reduced federal funds in block form, and state officials will be charged with deciding how much money from the grant will be allocated to lead screening. Thousands more children stand to lose the protection of this vital program if state governments fail to recognize the existence of lead as a pre-eminent public health problem and to plan aggressively for its control.

NOTES

1. Mahaffey, K.R., et al., National Estimates of Blood Lead Levels: United States, 1976-1980: Association with Selected Demographic and Socioeconomic Factors. N. Eng. J. Med., 1982; 307: 573.

2. Personal communication, Dr. Jane Lin-Fu, U.S. Dept. of Health and Human Services.

3. Mahaffey, p. 576.

4. Needleman, H.L., et al., Deficits in psychologic and classroom performance of children with elevated dentine lead levels. N. Eng. J. Med. 1979: 300: 688.

5. Winneke, G., et al., Neuropsychological comparison of children with different tooth lead levels: A preliminary report. In Proceedings of the International Conference on Heavy Metals in the Environment, World Health Organization, Geneva, 1981, p. 553; Yule, W., et al., The relationship between blood lead concentrations, intelligence, and attainment in a school population: A pilot study. Develop. Med. Child Neurol. 23, 567, 1981.

6. Provenzano, G., The social costs of excessive lead exposure during childhood, In Needleman, H.L., ed., Low-Level Lead Exposure, Raven Press, 1980.

7. Data taken from Centers for Disease Control reports of childhood lead screening program activities, FY 1981.

8. Ibid.

Appendix

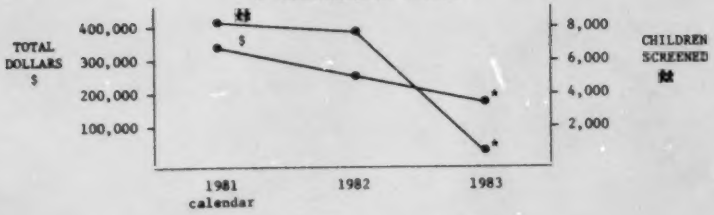
The pages that follow give a detailed city-by-city breakdown of the effects of block grant funding on eight of the nation's most important lead screening programs. (Programs in two of the ten geographic areas studied receive exclusively local funding; these programs do not appear in the appendix.)

14-591 O - 83 - 4

Newark, N.J.

RANK AMONG 10 WORST
U.S. CITIES FOR LEAD PROBLEMS: 2nd

EFFECT OF BLOCK GRANT AND FUNDING CUTS
ON LEAD SCREENING PROGRAM



Total number of children who need screening: 40,000*

(* estimated)

	1981	1982	1983
FUNDING	$356,238 categorical grant	$ 97,402 leftover categor. grant (4½ months' worth) 176,000 MCH block grant $273,402 TOTAL	$190,000* MCH block grant (Approx. $290,000 needed to operate program at current levels.)
CHILDREN SCREENED	8,423	8,000*	300*

EFFECTS OF BLOCK GRANT AND BUDGET CUTS:

1982: • 5 of 17 staff members fired (2 (out of 4) health aides, 1 (out of 2) public health nurse, 1 environmental investigator, assistant director). Subsequent reduction in ability to provide health care.

1983*: • Doctor's office hours reduced or eliminated.

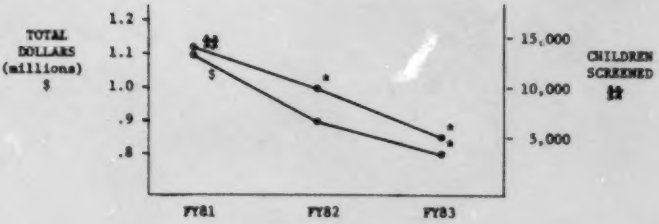
• Follow-up of hospitalized children only. No follow-up of cases with milder, but serious, lead problems to insure that lead levels remain in the safe range. Reduced parental education.

• Co-ordination of screening by area hospitals (currently 2/3 of total screens) to continue, but in-house screening (8,000 per year) reduced to several hundred.

St. Louis, Mo.

RANK AMONG 10 WORST
U.S. CITIES FOR LEAD PROBLEMS: 3rd

EFFECT OF BLOCK GRANT AND FUNDING CUTS
ON LEAD SCREENING PROGRAM



Total number of children who need screening: 33,000*

(* estimated)

	FY81	FY82	FY83
FUNDING	$1.1 million categorical grant	$400,000 City of St. Louis 360,000 Community Dev. block grant (HUD) 100,000 leftover cat. gr. 45,000 MCH block gr. $905,000 TOTAL	$750,000 to $850,000* (Depends on whether City of St. Louis makes up $100,000 in lost leftover categ. grant)
CHILDREN SCREENED	14,000	10,000*	5,000*

EFFECTS OF BLOCK GRANT AND BUDGET CUTS:

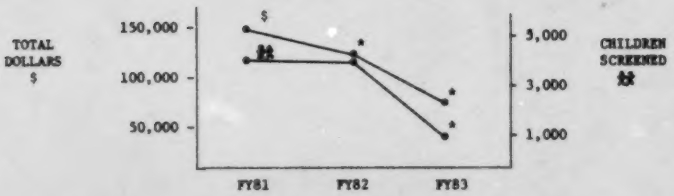
FY 1982:
- 1 (out of 2) mobile lead screening crews fired. Result: 4,000 fewer children screened.
- Total staff cut by 50% (38 of 75 persons fired). Many fewer high-lead children monitored and treated for lead problems.

FY 1983:*
- Additional firing of 4 to 13 staff members.
- Further drastic reduction in children screened (5,000 fewer screens).

Jersey City, N.J.

RANK AMONG 10 WORST
U.S. CITIES FOR LEAD PROBLEMS: 4th

EFFECT OF BLOCK GRANT AND FUNDING CUTS
ON LEAD SCREENING PROGRAM



Total number of children who need screening: 20,000*

(* estimated)

	FY81	FY82	FY83
FUNDING (DOLLARS & SOURCE)	$143,127 categorical grant	$21,000 energy grant 20,000 leftover categorical grant 79,000 MCH block grant $120,000 TOTAL	$75,000*
CHILDREN SCREENED FOR LEAD POISONING	3,922	4,000*	1,000*

EFFECTS OF BLOCK GRANT AND BUDGET CUTS:

FY 1982:
- 2 (out of 8) staff members fired. Reduced overall ability to provide adequate health care.

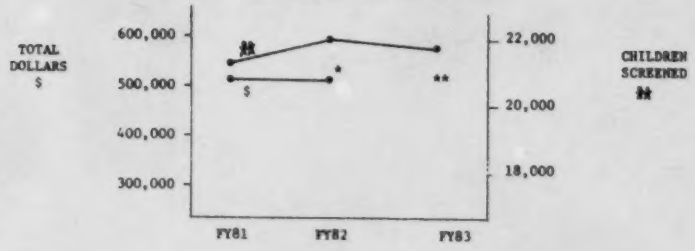
FY 1983:
- 75% reduction in number of children screened.
- Possibility of additional staff reductions.

Philadelphia, Pa.

RANK AMONG 10 WORST
U.S. CITIES FOR LEAD PROBLEMS: 5th

EFFECT OF BLOCK GRANT AND FUNDING CUTS

ON LEAD SCREENING PROGRAM



Total number of children who need screening: 150,000*

(* estimated)

(** estimate unavailable)

	FY81	FY82	FY83
FUNDING (DOLLARS & SOURCE)	$515,000 categorical grant	$515,000*	estimate unavailable
CHILDREN SCREENED FOR LEAD POISONING	21,005	22,000*	somewhat less than 22,000*

EFFECT OF BLOCK GRANT AND BUDGET CUTS:

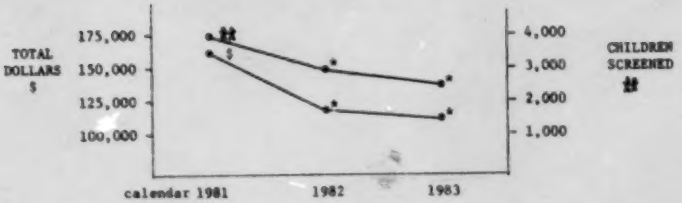
FY 1982: • Minimal. State of Pennsylvania made up the difference in lost federal dollars.

FY 1983: • Probably minimal.

Paterson, N.J.

RANK AMONG 10 WORST
U.S. CITIES FOR LEAD PROBLEMS: 7th

EFFECT OF BLOCK GRANT AND FUNDING CUTS
ON LEAD SCREENING PROGRAM



Total number of children who need screening: (unavailable)

(* estimated)

	1981	1982	1983
FUNDING (DOLLARS & SOURCE)	$161,000 categorical grant	$22,000* leftover categ. gr. 79,000 MCH block grant 21,000 energy grant $122,000* TOTAL	reduced funding expected
CHILDREN SCREENED FOR LEAD POISONING	4,298	3,000*	2,500*

EFFECTS OF BLOCK GRANT AND BUDGET CUTS:

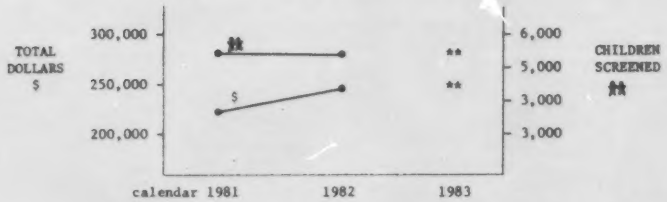
1982:
- 2 (out of 9) staff members (health aide and clerk) fired.
- Doctor's office hours reduced from 6 hrs./week to 2 hours/week.
- Follow-up ability hurt.
- 28% reduction in children screened.

1983:
- Further reduced screening capacity. Possibility of reduction in home visits and other follow-up.

Monroe County (Rochester), N.Y.

RANK AMONG 10 WORST
U.S. CITIES FOR LEAD PROBLEMS: 8th

EFFECT OF BLOCK GRANT AND FUNDING CUTS
ON LEAD SCREENING PROGRAM



Total number of children who need screening: (estimate unavailable)

(* estimated)
(** estimate unavailable)

	1981	1982	1983
FUNDING (DOLLARS & SOURCE)	$224,997 categorical grant	$169,000 MCH block grant 82,591 New York State $251,591 TOTAL	estimate unavailable
CHILDREN SCREENED FOR LEAD POISONING	5,600*	5,600*	estimate unavailable

EFFECTS OF BLOCK GRANT AND BUDGET CUTS:

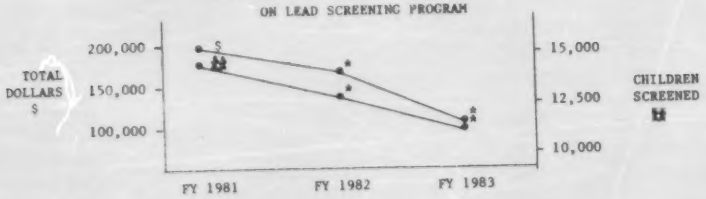
1982: • 3 (out of 10) staff members lost due to reduction in contracts funding (2 liaison personnel, 1 city building inspector).

1983: • Even if program incurs any significant cuts, screening should not be severely affected, since most screens are done by private physicians. But follow-up, environmental investigations, and lab work will be curtailed. Staff has already been cut to skeleton crew.

Cleveland, Ohio

RANK AMONG 10 WORST
U.S. CITIES FOR LEAD PROBLEMS: 9th

EFFECT OF BLOCK GRANT AND FUNDING CUTS
ON LEAD SCREENING PROGRAM



(* Estimate)

Total number of children needing screening: (unavailable)

	FY 81	FY 82	FY 83
FUNDING (DOLLARS & SOURCE)	$202,000 categorical grant	$ 96,000 MCH block grant 74,000* categorical grant $170,000 TOTAL	$109,000 (A 20% cut. Expected cut: 5%-35%. $165,000 needed to maintain status quo.)
CHILDREN SCREENED FOR LEAD POISONING	14,000	12,700*	11,300* (Few staff resources go to screening. Emphasis is on follow up.)

EFFECTS OF BLOCK GRANT AND FUNDING CUTS:

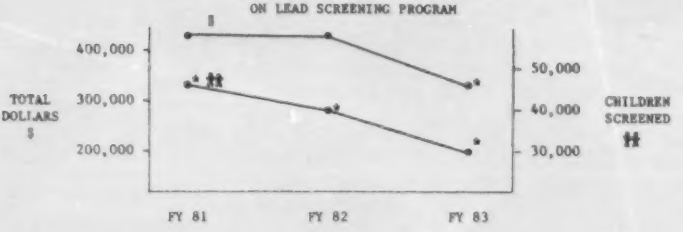
FY 82: • 9% reduction in children screened for lead poisoning.

FY 83*: • Estimated 19% reduction in children screened.
• If 10% of funds are cut, 35% of follow-up will be abandoned. More severe cuts will result in drastic reductions in ability to insure that lead levels in treated children remain low.

Chicago, Ill.

RANK AMONG 10 WORST
U.S. CITIES FOR LEAD PROBLEMS: 10th

EFFECT OF BLOCK GRANT AND FUNDING CUTS
ON LEAD SCREENING PROGRAM



(* estimate)

Total number of children needing screening: (unavailable)

	FY 81	FY 82	FY 83
FUNDING (DOLLARS & SOURCE)	$425,000* categorical grant	$ 300,000 MCH block grant 125,000* state & city funds $ 425,000 TOTAL	$331,000*
CHILDREN SCREENED FOR LEAD POISONING	45,000*	40,000*	30,000*

EFFECTS OF BLOCK GRANT AND BUDGET CUTS:

FY 82: • 11% reduction in children screened for lead poisoning.

FY 83*: • Additional 25% reduction in children screened.

ERRATA

In Table 2 and the Appendix, the estimated number of children screened for lead poisoning in Newark, NJ in FY 1983 should read 3,000, not 300. This changes the overall average reduction in children screened in FY 1983 to -50% of FY 1981 levels, rather than -55%.

Mr. WAXMAN. Thank you for your testimony. That is an excellent statement.

Could you elaborate on the study and the findings? Which cities did you look at, and what, briefly, were the reductions in service to children that each reported?

Mr. JOHNSON. We looked at 10 cities, cities with particularly high positive screen rates. That is the percentage of children screened who are found to need the medical care. So we were dealing with a concentration of the lead problem as opposed to raw numbers of children who need care. We examined a number of programs in New Jersey that were lumped together by CDC; programs in Newark; St. Louis; Jersey City; Philadelphia; Atlantic City; Paterson, New Jersey; Monroe County, which is Rochester, New York; Cleveland, Ohio; and Chicago. These are the top 10 cities in the United States for positive screens. Two did not receive Federal dollars either under the categorical or block grant system so they were excluded from the study, so we were left with eight.

What we found is that in the first year of the block grant there were minor but significant, we believe, reductions in both dollars to the screening programs and children screened, about 10 percent in both cases. By the end of the next fiscal year, health officials predict that because of this increased competition for block grant dollars, now that lead screening has to compete with other programs in the MCH block and because many State legislators do not appreciate the importance of the program, they will see a 50-percent reduction in children screened.

Mr. WAXMAN. Is that the national estimate?

Mr. JOHNSON. It is an estimate based on these 8 cities. It is difficult to tell whether that is going to be a trend nationally or not. I would not be surprised if it is. Whether 50 percent or not, it is clear that a large percentage of children who need screening are not going to receive it under the block.

Mr. WAXMAN. That is a very sobering perspective. The Congress is concerned because we realize that we are throwing away the future. Young people are the future of this country, and this problem is going to distress all of us. I find that a disturbing realization. People talk about dollars and block grant formulations, but there is an impact on human lives that goes along with it.

Thank you very much.

Ms. Mikulski.

Ms. MIKULSKI. Thank you, Mr. Chairman.

Mr. Johnson, thank you for that very crisp and yet poignant testimony. The chairman asked some of the questions that I had. I was interested in the point in your testimony where you talk about other sources of lead that would affect children, and you specifically mentioned food, dust, and so on. I must confess I am not as familiar with these other sources that you have outlined, particularly in food. Could you outline what some of these are so I would have a better idea? I think we tend to focus on cities and paint.

Mr. JOHNSON. Lead in food comes from a variety of sources. Even if you buy—I will start with canned foods. Seventy-five percent of the canned foods on the market are sealed with lead solder. This is how the can is made. That lead solder contributes some lead to the contents, particularly if the can is opened and the food is stored in

the can after opening, and if the food is acidic—fruit juices, fruits, tomato sauce, et cetera. Under those conditions lead leaching occurs very quickly and in just several days, very hazardous levels of lead can build up in the can's contents. We are talking about levels hazardous to small children and infants. So part of the lead in our food supply comes from lead solder. Some is also contributed during the canning process, through accidental contamination. Some happens even with fresh foods, because lettuce or spinach grown in a field is often near a roadway. If a car uses leaded gasoline, that lead travels out the exhaust pipe and into the air to settle on the leaves. The lead is transferred to us when we eat the produce. Lead comes from all over.

Ms. MIKULSKI. Is that really serious, when we talk about growing food? For example, in certain areas there is truck farming. Also in certain cities, one of the things that has been encouraged is urban gardening, a way to grow your own food and save money and also have something fresh. When one lives in the city growing food, particularly in communities like mine, which is urban, say we are growing tomatoes in Baltimore City in my neighborhood, which is halfway industrial, that would have lead on the food; is that correct?

Mr. JOHNSON. That is correct.

Ms. MIKULSKI. How serious is that impact?

Mr. JOHNSON. It is really difficult to tell how much of a hazard to health a tomato that has been grown in a high-lead area is. What is clear, and I base this on a report by the National Academy of Sciences, is that all the sources combined can greatly increase a person's exposure to lead. If you have a high-lead child and you want to decrease his or her exposure to lead, you can educate parents that lead comes from these sources, and that if they buy a can of food, they shouldn't store the food in the open can. If they have newspapers around with ink that contains lead, they shouldn's let their child chew on them. If they have a windowsill that collects city dust make sure it is cleaned once in a while so a child will not run his finger along it and pick up lead that way.

Ms. MIKULSKI. When you say water supply, is that urban water supply, well, spring water?

Mr. JOHNSON. It is difficult to say. The National Academy of Sciences has looked closer at this than our coalition has. My impression is it can come from two sources, either lead pollution from factories that use lead—battery factories, for example, where effluent gets into the stream, or relatively safe water that travels through old pipes that are leaded and so lead is picked up that way.

Ms. MIKULSKI. Thank you. You have told me a lot I did not know this morning. Thank you.

Mr. WAXMAN. Mr. Johnson, we appreciate very much your testimony.

Ms. MIKULSKI. That was superb. Thank you.

Mr. WAXMAN. Our next two witnesses have been involved with the lead screening program here in the District of Columbia, Ms. Karen Ehrnman and Dr. Francis M. Palumbo. Both are associated with the Committee for Lead Elimination Action in the District of Columbia. Dr. Palumbo serves as associate director of children and youth ambulatory services in the Georgetown Hospital.

I thank both of you for being here to testify. We want to welcome you. We will make your prepared statements part of the record, and we would like to ask you to summarize them in as brief a period of time as possible so that we can have an opportunity for questions and answers.

STATEMENTS OF KAREN EHRNMAN, M.P.H., COORDINATOR, COMMITTEE FOR LEAD ELIMINATION ACTION, DISTRICT OF COLUMBIA, AND ALSO CHILDREN'S HOSPITAL NATIONAL CENTER; AND FRANCIS M. PALUMBO, M.D., ASSOCIATE DIRECTOR OF CHILDREN AND YOUTH AMBULATORY SERVICES, GEORGETOWN HOSPITAL

Ms. EHRNMAN. I appreciate the opportunity to be here today. I am here in a capacity as the coordinator of the Committee for Lead Elimination Action in the District of Columbia. This group is an advocacy group and we are an advisory committee to our city's lead poisoning prevention program. The goal of our committee, which is a broad-based consortium of public and private agencies, is the eradication of lead poisoning in Washington.

I would like to describe our efforts in dealing with the maternal and child health block grant in the District of Columbia. I feel we all need to work together to create an imaginative way to finance health care that will provide quality care for our children. To begin, our committee has been monitoring our city's lead program for the last 10 years. We are aware of its strengths as well as its weaknesses. As such we have followed the recommendations of the Reagan administration in trying to educate our city health officials to the problem. We have provided extensive testimony as well as a broad base of technical assistance to the city.

Regardless, today, to the best of my information, our funding level for 1983 is $137,000, which is less than one-half that in 1982. I must say at the present moment we are experiencing a reprieve because although the funding level for the block grant in 1983 is at that $137,000 level, the Commissioner of Health and the Mayor for the 3 months, October, November, and December, are funding the program at the 1982 level while they investigate additional sources of funds.

I would like to put this severe reduction in funding for the program within the context of the maternal child health block grant to the District of Columbia. In my written testimony I have submitted some of the actual dollar figures. In 1981 the block grant allocation was approximately $8 million; in 1982 it goes down to—in the attachment B it is $4 million, but it was actually $5 million because of a supplemental appropriation which came through late last summer. I would like to inform you that even with this $5 million supplemental appropriation, the city was required to transfer funds from the preventive block grant and the alcohol and drug abuse and mental health block grant. 1982 promises to be similar in the District with the funding level at $137,000. This depends on the continuing resolution before Congress, and all of us are reading the newspaper daily and are aware of possible further cuts in D.C.

I would like to convey that these drastic cuts are occurring in a supportive atmosphere in the District of Columbia. The mayor and

the Commissioner of Health understand lead poisoning. The mayor has had his son tested for lead and has indicated to us a broad range of support. Despite this and because of other acute problems in the District, we are finding we need to live with these lower dollar expenditures.

Categorical funding can insure that high-risk areas such as the District of Columbia can spend additional moneys on preventive health care, and I am including lead screening and treatment programs within that category. I am not advocating going back to the old system of categorical grants, but instead creating an imaginative way that Federal categorical funding can provide incentives to States and to high-risk areas by which jurisdictions are rewarded for their success in preventing diseases. In the District of Columbia in 1973 our rate was 32 percent, and we are happy to be down to a rate of 1.2 percent. It is difficult when you have succeeded to convince officials that in fact you still have a problem.

I would like to point out one additional reason why we are supporting categorical funding, and that is something that has to do with the way once a child is identified with lead poisoning, cities go into the homes and look for lead-based paint. They use special machines called X-ray fluorescent analyzers. We need these machines because they are a less expensive means to determine lead-based paint. We also look for other sources. Since the Center for Disease Control has taken a lower profile, there is no longer a company manufacturing these machines. This is a great problem for us.

We have tried to interest companies in providing this assistance, but one city alone cannot convince companies to manufacture machines. In conclusion, the future of lead poisoning prevention in the District is uncertain. We are concerned with the national data which indicate that 4 percent of children in our Nation have lead toxicity. We must continue to move beyond paying for sickness to preventing it and I hope that my comments this morning can assist you in working with us to provide such public policy for the United States.

[Ms. Ernman's prepared statement follows:]

TESTIMONY

of

Karen Ehrnman, M.P.H.

Good Morning. I am Karen Ehrnman of Children's Hospital National Medical Center's Office of Child Health Advocacy. I coordinate the Committee for Lead Elimination Action in the District of Columbia (L.E.A.D.), a consortium of public and private agencies, organizations, and concerned individuals, representing a broad cross-section of the District of Columbia's services and resources. We are an advocacy group as well as an advisory committee to the city's lead program. The goal of our committee is the erradication of the lead poisoning problem from Washington, D.C.

This morning I have been extended the privilege of testifying before this Subcommittee. Specifically, I would like to describe to you our committee's extensive efforts in dealing with the Maternal and Child Health (MCH) block grant as it affects our city's lead poisoning prevention program. I am pleased to have the opportunity to share this information with you as I believe that the nature of the financing of health care programs will have far-reaching implications for the quality of health care we will be pro[illegible]ng to our children in the decade of the eighties.

To begin, our all-volunteer committee has been advocating on behalf of lead-toxic children for almost ten years. Membership includes parents of lead-toxic children, physicians, housing inspectors, public health officials, lawyers, landlords, university officials, school teachers, local legislators, and others-all committed to the prevention of lead poisoning. Together, we have monitored and provided technical assistance to the city's lead poisoning prevention program which, you know, has been a categorical grant funded in the past through the Center for Disease Control. Our committee is well acquainted with our lead program's strengths as well as its weaknesses. We are proud of its success. In 1973, approximately 32% of children screened had elevated blood

lead levels. Today, this figure has dropped dramatically to 1.2% (attachment A). 1983 is the District of Columbia's first full year of block grant funding for this program. Accordingly, our committee has carefully followed the administration's recommendations for educating state officials to the need for the program. We have participated in extensive consultation with the state health department and have provided testimony before the State Health Planning and Development Agency as well as the City Council. We have also submitted extensive documentation of the program's effectiveness to the Commissioner of Health and to the Mayor. Regardless, the best information available as of today is that funding for the program in 1983 is projected to be less than one-half the 1982 funding level (1982 funding allocation was approximately $296,000; 1983 MCH block grant allocation is approximately $137,000). At the moment, however, we are experiencing a brief reprieve. Although the 1983 fiscal year officially began on October 1, 1982, the city's lead program continues to operate at the 1982 funding level. This decision, which is in effect until December 31, 1982, was made by city health officials to allow sufficient time to identify additional city funds to supplement the block grant.

At this time, however, I would like to put these funding figures within the context of maternal and child health dollars coming into the District of Columbia from the federal government (attachment B). In 1981, budget authority for maternal and child health programs was $8,234,219. In 1982 there was a substantial reduction in the funding to a level of $5,008,000. (The city received a supplemental allocation in July which increased the level from $4,679,000. to $5,008.00.). The provisional funding for 1983-based on the continuing resolution-continues at the same level, another loss for the city once inflation is taken into consideration. Of these funds, less than 3% has been allocated to the city's lead screening and treatment program. However,

from a review of the proposed MCH allocations (attachment C) it is clear that many valuable child health programs are competing for limited dollars. Certainly, in talking with both the Mayor and the Commissioner of Health, it has been evident that they are aware of the need for this preventative program. However, as we all know, urban areas are troubled by high rates of infant mortality, tuberculosis and other health problems-urgent problems which require large dollar expenditures and leave little in reserve for the prevention of disease.

The lead screening programs are not examples of pure primary prevention, but the screening of high risk children has assisted in the early identification of a lead problem (with subsequent removal of the source of lead from the child) as well as heighten community awareness of the environmental risk. This certainly accounts, in part, for our success in the District of Columbia. The lead-based paint on old houses as well as the many other sources of environmental lead continue to surround our children.

In some ways our success is a problem. It is easily assumed by health officials that because of the dramatic decline in the rate of lead toxicity that the problem has been solved. It is much more difficult to explain that the decline in the rate of the disease is due in part to the dollars spent-that environmental lead hazards remain-that new children are born and move into high risk environments-that new parents need educating-and perhaps, most important, that we have a much better knowledge of the devastating effects of even low level lead exposure in children. Whereas ten years ago we worried about children having seizures and dying of lead poisoning, today we are concerned about the damaging effects of lead on the brain and central nervous system at a much lower level of exposure. The nature of the problem has changed, but in some

ways it has become more elusive and more complex. Categorical federal funding targeted at specific problems ensures that high risk areas will spend some health dollars on prevention. Instead, today in the Dimtrict of Columbia we are uncertain of the outcome of the deliberations about the block grant in relationship to the lead program.

Permit me one further example to indicate the need for a continued national focus on the prevention of lead poisoning. In the District of Columbia, once a child is identified with an elevated lead level, the home is inspected for lead-based paint hazards. The most efficient and most cost-effective means of this inspection is with the flourescent analyzer. With the loss of a national coordinating ability there is no longer a company in the United States manufacturing such machines. Cities must rely on repair of old machines and the more expensive laboratory analysis of paint chips. It would seem that we could do better than this in 1982.

The findings of the Second National Health and Nutrition Examination Survey confirmed the health impact of continued lead pollution-4% of our nation's children have lead toxicity. By a combined approach of reduction of environmental lead exposure, public education, and quality screening and treatment programs further reduction in undue lead absorption is possible. To shepherd our resources we must go beyond paying for sickness to preventing it, beyond restoring good health to engendering it. Thank you for your attention.

KE/jj

D8212/11

14-591 O - 83 - 5

Community Involvement in the Prevention of Childhood Lead Poisoning

Attachment A

Committee for Lead Elimination Action
in the District of Columbia 745-3029 Karen Ehrnman, M.P.H.

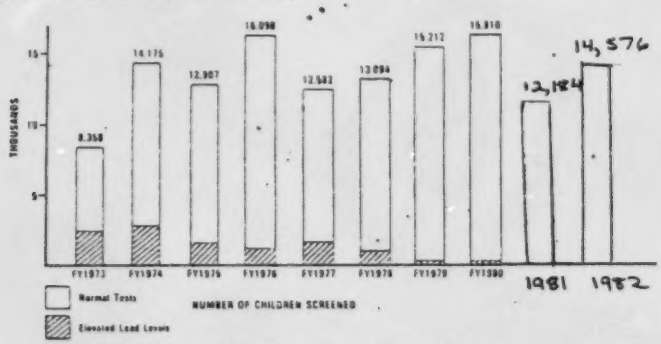
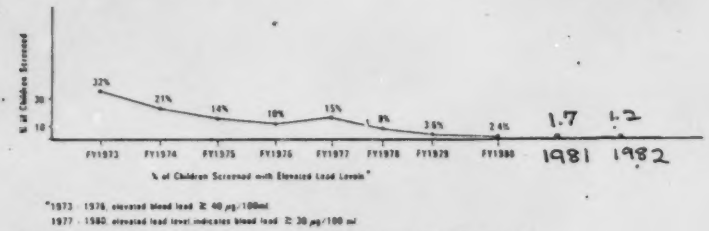


Fig. 1. Number of children screened for lead, Washington, DC, 1973–1980. Source: DC Department of Human Services.



*1973 - 1976, elevated blood lead ≥ 40 μg/100ml
1977 - 1980, elevated lead level indicates blood lead ≥ 30 μg/100 ml

Fig. 2. Percentage of children screened with elevated lead levels. Source: DC Department of Human Services.

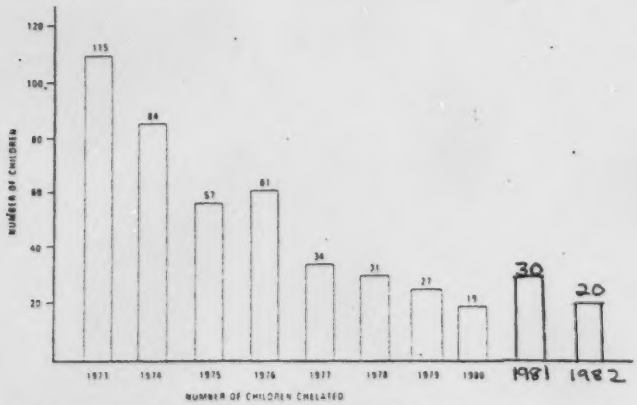


Fig. 3. Number of DC children chelated, 1973–1980. Source: DC Department of

Attachment B

Health Programs to Deprive Millions of Needy of Care

MAJOR FEDERAL HEALTH GRANT CUTS

(FEDERAL FISCAL YEARS)

PROGRAM[1]	NATIONAL TOTALS			D.C. TOTALS			MARYLAND TOTALS			VIRGINIA TOTALS		
	BUDGET AUTHORITY			BUDGET AUTHORITY			BUDGET AUTHORITY			BUDGET AUTHORITY		
	FISCAL 1981	FISCAL 1982[2]	% CUT	FISCAL 1981	FISCAL 1982[2]	% CUT	FISCAL 1981	FISCAL 1982[2]	% CUT	FISCAL 1981	FISCAL 1982[2]	% CUT
PREVENTIVE HEALTH BLOCK GRANT	$93,070,000	$81,600,000	12.3%	$768,427	$634,000	14.9%	$2,042,186	$1,526,000	25.3%	$1,909,826	$1,626,000	14.9%
MATERNAL AND CHILD HEALTH BLOCK GRANT	$454,393,000	$347,520,000	23.5%	$8,234,319	$4,679,000	43.2%	$11,626,710	$7,293,000	37.3%	$9,224,086	$7,086,000	23.2%
ALCOHOL, DRUG ABUSE AND MENTAL HEALTH BLOCK GRANT	$548,515,000	$432,000,000	21.2%	$6,205,000	$2,102,000	66.2%	$11,846,000	$3,596,000	69.7%	$8,800,000	$6,657,000	24.4%
COMMUNITY HEALTH CENTERS (PRIMARY CARE)	$327,116,000	$248,400,000	24.1%	$2,364,153	UNKNOWN[3]		$9,537,889	UNKNOWN[3]		$3,032,677	UNKNOWN[3]	
FAMILY PLANNING PROGRAM	$161,671,000	$124,800,000	22.8%	$1,365,000	UNKNOWN[3]		$2,656,521	UNKNOWN[3]		$2,851,375	UNKNOWN[3]	

FOOTNOTES

[1] The preventive health block grant consists of the former health incentive, risk reduction, fluoridation, rat control, hypertension, emergency medical services, rape crisis counseling and home health services programs. The fiscal 1981 figures represent the total of budget authority provided for these programs in fiscal 1981 when they were separate programs. The maternal and child health block grant consists of the former maternal and child health program, crippled "SSI" children, genetic diseases, hemophilia, sudden infant death syndrome, lead paint poisoning and adolescent pregnancy program. The alcohol, drug abuse and mental health block grant consists of five formerly separate programs on the subjects now consolidated into a block grant.

[2] Tentative figures based on final fiscal 1982 continuing resolution. Certain discretionary powers granted to Secretary of Health and Human Services could slightly alter the fiscal 1982 national totals for each program or add to the D.C., Maryland and Virginia 1982 allocations in maternal and child health.

[3] Local allocations for community health centers and family planning are unknown. These funds in fiscal 1982 are to be distributed on a discretionary basis to individual projects and centers nationwide, not under a geographical formula. The Secretary of HHS has not yet announced final distribution of the funds.

NOTE: Maryland and D.C. reductions in grants for alcohol, drug abuse and mental health are large because the fiscal 1981 totals include certain one-time grants, of special national significance, to research or service components in these areas. These grants and contracts were not figured into the geographical base when calculating the 1982 allocations.

SOURCE: DEPARTMENT OF HEALTH AND HUMAN SERVICES

By Curt Matthews — The Washington Post

"What's people like us going to do?" agonized the sobbing woman, who swooned into a chair at the store out of weakness and anxiety over payment when she learned her Medicaid card no longer was honored and she would not be eligi-

these actions, not merely to absorb the federal cut, but to reduce its own outlays as well. Maryland and the District of Columbia expect to absorb the cuts at least for this year and make do without service ...

... In general, the cuts are 20 to 25 percent of the 1981 program levels, but if certain one-time grants to research and other health institutions within Maryland and the Di... are

impact until next July 1 when the state's new fiscal year starts. But he said officials already are tentatively planning to reduce f...

Attachment C

MATERNAL & CHILD HEALTH SERVICES

$ THOUSANDS

Program Area Name	1982 Categorical	1982 Block Grant	1982 % of Block	1982 Appropriated Amounts	1982 TOTAL	1983 Block Grant	1983 % of Block	1983 Appropriated Amounts	1983 TOTAL
Maternal & Child Services	a/ 193.6	3,749.2	80.1	.....	3,942.8	3,749.2	80.1	.....	3,749.2
Crippled Children Disability Program	.....	295.5	6.3	.....	295.5	176.8	3.8	.....	176.8
Prevention Ed. Counselling	421.3	64.7	1.4	.....	486.0	177.1	3.8	.....	177.1
Projects of Regional Nat'l Significance	977.5	48.9	1.0	.....	1,026.4	51.8	1.1	.....	51.8
Special Emphasis Programs	.....	52.8	1.1	.....	52.8	56.2	1.2	.....	56.2
Administration	.....	467.9	10.0	.....	467.9	467.9	10.0	.....	467.9
Ambulatory Health Care Administration	.....	.....	.....	12,166.8	12,166.8	.....	.....	11,813.1	11,813.1
TOTAL	1,592.4	4,679.0	100.0	12,166.8	18,438.2	4,679.0	100.0	11,813.1	16,492.1

a/ Transfers into block grant.

Source: Testimony from D.C. Department of Human Services before D.C. City Council on Friday, July 23, 1982.

Mr. WAXMAN. Thank you very much. Your testimony will be of great assistance to us as we bring this problem to our colleagues' attention.

Dr. Palumbo.

STATEMENT OF FRANCIS M. PALUMBO, M.D.

Dr. PALUMBO. My comments will be from a slightly different perspective.

I am also, in addition to my other duties, a practicing pediatrician in Washington, and did have on a number of occasions the opportunity to deal with a number of families in whom children were in fact poisoned with lead.

My testimony deals primarily with a family of six children. Initially only five of them were affected with lead poisoning, now the sixth is also. The impact of lead poisoning on a family can be quite significant, as it was in this family.

The initial symptoms were very mild and nonspecific. Fortunately these children were screened, and they were identified as having mildly elevated levels of lead. Had they not been screened, the initial symptoms were so nonspecific that it would have been very likely that they would not have been attended to as quickly as they were. Because they were screened, they were immediately brought to our facility, and we retested them and found that their levels were extremely elevated to the point of being critical, to the point where seizures were imminent if they were not immediately attended to.

They were brought into the hospital. They were treated, the treatment was costly, lengthy, and painful. A number of them had to be retreated for the same problem. It was fortunate that we were able to identify the problem though before the outcome could potentially have been tragic. It was only through the fact that these children were screened and identified early that we were able to do this.

Other stories are similar. This is not uncommon. I would only say that the resources that went into the identifying of this family, the subsequent followup of this family, were significant.

As was stated earlier, it is followup, it is education, it is outreach, without which a screening program is useless, without proper followup, without proper resources available to do something about what you are finding.

As Karen said, in the District the funding is going to be cut severely unless other funds are found, and it seems to me that it is unreasonable to think that we will be able to continue this type of program at this level with the success and efficiency with which the program in the District is run unless funds are made available through the Government, through creative refunding and, as Karen suggests, or from whatever sources.

[Dr. Palumbo's prepared statement follows:]

TESTIMONY

of

FRANCIS M. PALUMBO, M.D.

It started mildly enough - mild abdominal pain, some slight changes in behavior. Mother was concerned - as any caring mother would be - when the symptoms persisted. These complaints would ordinarily have been dismissed as insignificant - an impending mild stomach-flu or the difficult temperment of a toddler. Fortunately, Tony had been screened for lead poisoning. His lead level at the time of screening had been only minimally elevated but was indicative of an environmental lead hazard. Could he have been continually exposed to this hazard? Could he have been continually ingesting this lead? Could these complaints have been the early symptoms of clinical lead poisoning? Tony was quickly brought to my office. Emergency lead levels were drawn on him and his four other siblings. I was startled by the results. All five children including the 8 month old had dangerously high levels. Their levels were so extremely elevated that seizures were imminent. The situation was critical. The children were admitted to the hospital where they underwent a series of very painful injections in order to cleanse their systems of their potentially fatal toxin. The treatment was successful. The lead that was insiduously poisoning their systems was reduced to safer levels. Had these children not been screened the outcome would have been tragic - five perfectly normal, healthy, happy children would have suffered significant and lasting brain damage. The burden on their lives, their family and society would have been immeasurable.

The story of Tony and his family is only one of many such stories around this city. Another patient of mine was identified as having an excessive lead level after being screened at a local health fair. She, too, was successfully chelated before significant damage occurred.

It is clear from these brief case presentations that appropriate screening tests prevent the significant consequences of easily treatable conditions such as lead poisoning. It is also clear that the success of lead screening programs around the country is being threatened by the block grant budget cuts. As less children are screened, as less outreach and education is done, as fewer homes are abated of excessive lead hazards, children like Tony will not be identified until significant irreversible damage has already occurred. It is, therefore, essential that lead poisoning prevention programs continue to function at their present levels of efficiency and success. In order for this to occur, it is clear that funding must remain at reasonable levels. It it is unreasonable to expect funding to be adequate under the present block grant allocations.

Mr. WAXMAN. Thank you.

Ms. Ehrnman, I want to commend your all-volunteer committee on the work it has done. Is the committee in a position to pick up on those activities that the District may be forced to cut back on?

Ms. EHRNMAN. No. Our committee is advisory to the program. We do not deliver any direct services.

Mr. WAXMAN. What program is the lead prevention program competing against for funding?

I think that would give us some idea of the dilemma that must go on at the local government level.

Ms. EHRNMAN. Attachment C gives some indication of that. The large portion of moneys spent in this city are on maternal and child health clinics throughout the city, the crippled children's program, other education and counseling services, sudden infant death syndrome, and there are others. Tough competition.

Mr. WAXMAN. So, in the District of Columbia or the States throughout the country, they have to choose between these programs to aid crippled children, to screen for lead poisoning, one to give to another. All of these programs competing and going without sufficient funding I would expect is the case.

Dr. PALUMBO. From my perspective as being a practicing pediatrician, it seems to me that there just isn't enough money to go around.

Mr. WAXMAN. If a child has low-level lead poisoning, is there a seizure impact?

You mention nonspecific symptoms; could a child be thought of as being slow or having behavioral problems?

Dr. PALUMBO. In this particular case there was a change in behavior, nonspecific and nominal complaints. We were seeing the symptoms of early acute lead poisoning. If the exposure had been allowed to continue, we would have seen what we don't usually see much any more, the coma, the seizures. The more insidious symptoms of chronic lead exposure, behavior problems, learning problems, which are much more difficult to pick up on because they are insidious and chronic.

You may see a child who is not performing as well as you would expect or a child who is not doing the things that they had been doing previously. In high risk situations, lead should always be considered as a potential cause of these problems.

Mr. WAXMAN. You say we don't see many of these problems any more because of screening, but if we don't have screening capabilities, we will see more of these problems?

Dr. PALUMBO. That is a logical conclusion. The only reason the family was brought in when they were was simply because they had been screened.

Mr. WAXMAN. Ms. Mikulski.

Ms. MIKULSKI. Thank you for telling us about Tony, because when we deal in large numbers it is hard to put a human face to it. If I could go through with Tony, I really have—I would like to follow Tony through if I could.

We hear about screening, diagnosis, the treatment that you talked about, and I am interested in, one, how does it work, and second, kind of a per family or per case basis, how much did it cost to examine Tony? How much did it cost to treat Tony and his sib-

lings? And then, had it not been detected, what would you have done with Tony if he would have come in with it undetected? From the time he walked in, what are the diagnostic procedures?

Dr. PALUMBO. Well, the first thing we needed to do was to bring them back and confirm the values and see where they were. This required bringing all five of them into our facility, retesting them. We had to arrange for emergency testing to be done. The blood was taken by courier to the District.

Ms. MIKULSKI. It is a simple blood test?

Dr. PALUMBO. Initially. We did X-rays, looked at their blood counts, their urine, other areas where we might be able to detect the presence of lead.

Fortunately, because of the efficiency of the system in the District, we were able to get these tests done within a few hours. We realized then that that was a critical situation.

Ms. MIKULSKI. Is that average, shall I say, that you could have done the urine, blood, et cetera, and you said you had these in a matter of hours. Is that normal around the country?

Dr. PALUMBO. I am not sure. I am just familiar with the District, and it is a very efficient program, and we were able to take advantage of that. The children were then admitted to the hospital, and all five required therapy. We depleted the Washington area of the chelating agents so severe were the problems.

Incidentally, our pharmacy had to appeal to other local areas to get enough of the medication, since three children had to be rechelated. You are giving a dose with higher affinity for lead than the body. The medication draws the lead out of the tissues and it can then be excreted in the urine.

Ms. MIKULSKI. You say it is very painful?

Dr. PALUMBO. It is given by deep intramuscular injection, so it is painful.

Each received two injections during the day.

Ms. MIKULSKI. How long did it take to do that?

Dr. PALUMBO. The first course was 5 days, and then we had to wait a bit since there is a normal period where the lead rebounds and for three of them it rebound to where they had to be rechelated.

Ms. MIKULSKI. A quick diagnosis, not only in terms of the hours it took to identify the problem, but this was discovered early in terms of its body ramifications. When would a threshold have been crossed where you couldn't have brought those children back, or is all lead reversible?

Dr. PALUMBO. It depends on the level of the exposure and the chronicity of it. A child who has never been exposed to lead who wanders into a home where there is flaking paint and eats a few paint chips may rapidly increase their level and potentially not suffer damage, depending on how high the level is.

The child in the same setting who comes in, eats an excessive amount of lead-based paint, could have a seizure and go into coma and subsequently suffer significant brain damage.

The other situation would be the child who is exposed to chronic low levels of lead over a period of time during which time effects may not be as dramatic as a seizure or coma, but you get the subtle

complications, the learning problems, behavioral disorders, that have only been recognized within the last 5 years.

Ms. MIKULSKI. When the lead level is up, does it stay up?

Dr. PALUMBO. It depends on the exposure. If you remove them from the environment, it will go down but while the lead is there it does the damage. It is crucial to not only remove them from the environment, but to remove the lead from their bodies.

Ms. MIKULSKI. Say you had seen this family even a year or two later and the damge had been done, they would have had seizures in the home and so on, what do you do with those kids? What happens?

Dr. PALUMBO. After?

Ms. MIKULSKI. Yes.

Dr. PALUMBO. After they have already suffered significant damage, it depends on the severity of it. They would certainly need special education depending on the types of brain damage: Physical therapy, occupational therapy. If they were severely retarded, long-term institutionalization, significant cost, significant in trauma and emotional drain on the family. It would be a significant problem.

Ms. MIKULSKI. That takes me back to them coming in, why did Tony's levels get so high?

Dr. PALUMBO. The lead was in the home.

Interestingly, what might have happened in this situation when the initial lead hazard was identified, we went through the usual procedure, the usual protocol; the lead poisoning prevention program was notified, the home was inspected, the environment was identified as having lead-based paint. It was most likely when an attempt was made to clear the environment of the lead with scraping and peeling and sanding, a lot of lead was then released into the environment, and without proper—unfortunately, there were not proper precautions taken at the time of abatement to completely clean the home of the lead hazard, so there was a lot more lead in the environment because of the abatement procedure than there had been.

Ms. MIKULSKI. How much did the diagnosis cost per child? Do you know that?

Dr. PALUMBO. We had five children in the hospital for close to 2 weeks.

Ms. MIKULSKI. What was the treatment, the part where they are doing the blood and the urinalysis?

Dr. PALUMBO. Because of the lead program in the District, the actual testing was free. So that didn't cost the patient anything. It cost the District, the lead poisoning program.

Ms. MIKULSKI. How much did it cost the District?

Dr. PALUMBO. I am not certain.

Ms. EHRNMAN. I am not certain either. Blood tests are generally considered to be expensive, a urine test more.

Ms. MIKULSKI. Was it $10, $100?

Dr. PALUMBO. $10 sounds reasonable.

Ms. MIKULSKI. Maybe 10 bucks a child?

Ms. EHRNMAN. I think that is realistic. Certainly not any higher than $35. That would be the highest.

Ms. MIKULSKI. So for the diagnosis of Tony and his brothers and sisters, we spent not more than $100 or $125 for the diagnosis.

Then your treatment, of course, hospitalization—what is a day at Georgetown?

Dr. PALUMBO. It is somewhere in the $180 to $200 range per child.

Ms. MIKULSKI. And then the chelation, was that expensive?

Dr. PALUMBO. I am not sure of the cost of that, but I am sure it was. It is not a common medication, so I am sure it was expensive.

The other studies done, the X-rays and blood counts and blood tests, I am sure the hospital bill for all five children would have been significant, certainly in the thousands.

Ms. MIKULSKI. Probably paid for by medicaid?

Dr. PALUMBO. Yes.

Ms. MIKULSKI. The reason I am going through this almost tedious thing is that back here was $10 worth of medical diagnosis. The abatement was done. Because of the way the abatement was done, each next step becomes more complicated and ultimately more burdensome to the family and to society.

By the time we got the chelation, we were talking $1,000 or more per child. Once we got past that, had Georgetown not interceded, the cost to public facilities, it seems to me it increases geometrically.

Dr. PALUMBO. Yes.

Ms. MIKULSKI. That gives the whole argument for doing the program in the first place. These machines you talked about, what do they do? Do they do diagnosis?

Ms. EHRNMAN. You hold it against the wall of a building and it identifies whether or not there is lead-based paint on that wall.

Ms. MIKULSKI. It is portable?

Ms. EHRNMAN. Yes.

Ms. MIKULSKI. How much do they cost?

Ms. EHRNMAN. $7,000 per machine, but we can no longer buy a new machine. There is no company currently making the machines.

Ms. MIKULSKI. In Europe either, or——

Ms. EHRNMAN. I only know about the United States.

Ms. MIKULSKI. Maybe we better call Toyota and we could get it for $600 for the mayor's Christmas present.

You then tried to get companies to donate the machines?

Ms. EHRNMAN. No; we tried to get some companies interested in making them. It is evident that it is less expensive to use a portable machine that you put against the wall to identify if that is lead-based paint rather than needing to analyze paint chips in a laboratory. Even though the machines initially are expensive, when you are dealing with large numbers of children it is more cost effective to use machines.

In addition, in homes which do not have peeling and flaking paint, it is a lot to ask a family if you can chip their paint to analyze it, and you need to chip it in several different areas, because obviously children are exposed to more than one wall in the house. That is why the cities which had in the past been funded by categorical funds had these machines.

Ms. MIKULSKI. Why did they stop making the machines?

Ms. EHRNMAN. They were expensive to use. Only the cities that were funded were buying the machines and there was no incentive.

They knew the programs were joining into the block grant and then there was no incentive to buy the machines.

Ms. MIKULSKI. Thank you.

Mr. WAXMAN. Mr. Walgren.

Mr. WALGREN. Thank you, Mr. Chairman.

How many children are being screened now? I notice that the percentage with elevated levels is going down, but how many children are being screened?

Ms. EHRNMAN. Last year in the District, 14,000.

Mr. WALGREN. Is that fewer than in previous years?

Ms. EHRNMAN. No, it is about the same.

Mr. WALGREN. What are the sources of lead poisoning other than paint? Where is all this stuff?

Ms. EHRNMAN. In the District of Columbia, we can identify lead-based paint in the homes of about 85 percent of the children with elevated blood lead levels, blood lead levels over 30, which is the trigger point by which the city gets involved.

With those children we also find lead in dust in the homes, which probably initially comes from the lead-based paint, lead in the dirt outside the homes, obviously there is lead in the air. Certain children we have found lead in the ashes of fireplaces from the burning of newspapers and the parents have reported the children eating the ashes.

Occasionally we find families who are using old pewter containers which on analysis it is thought they contain lead and acidic juices will leach the lead out of the pewter, and pottery with lead glazes on, which causes additional source of lead to the child.

Mr. WALGREN. What is the status of present paints? If I go down to the store and buy paint——

Dr. PALUMBO. Interior paint now is lead free.

Ms. EHRNMAN. As is exterior.

Mr. WALGREN What about the spray cans of Rustoleum?

Ms. EHRNMAN. No lead. The last time I talked with the coating association, they assured me there is not lead in paint, with the exception of lead for bridges. There are specific paints containing lead, but in my conversations with them, I recall there is some sense of control for that, so that they feel that a family cannot easily get access to the paint for bridges and use it in homes.

Dr. PALUMBO. There has been a problem with the Mystic Bridge in Boston. Apparently there has been painting and scraping and there is some concern about the families in the area.

Mr. WALGREN. Thank you, Mr. Chairman.

Mr. WAXMAN. Thank you very much, Mr. Walgren.

Dr. Palumbo, Ms. Ehrnman, thank you for your contribution to this hearing.

Mr. WALGREN. I am sorry, if I could just ask one other question.

Mr. WAXMAN. Yes.

Mr. WALGREN What percentage of residences have lead-based paint presently, and does your program involve a universal screening of residences regardless of the age of the people living in the residences, and how completely have residential areas been screened for this?

Ms. EHRNMAN. For public housing, we have just completed here in the District a survey of all public housing which houses children

6 and under, so we know the status of that and there continues to be some lead-based paint in our public housing. But there is a special appropriation in the District to eliminate that hazard and that is being worked on.

In private dwellings we do not routinely go in and look for lead-based paint. Only when a child has been identified with an elevated blood level is the house inspected.

Mr. WALGREN So there are tens of thousands of units out there that might be lived in by a 65-year-old couple that next year a baby might move into and the only awareness of that would be through your community information system, and the parent must in fact pick up that warning and know to ask some question or have that home inspected; is that correct?

Dr. PALUMBO. Basically that is correct, but if a child in an area is identified as having lead poisoning and the home is inspected and found to have lead-based paint, teams will go out and screen children in the neighborhood and try to get a sense of what is happening in that neighborhood. So there is an effort made to identify—unfortunately, you cannot request a home to be inspected if a child has not, or someone has not been identified as having an increased lead level. That has come up a number of times.

But neighborhoods will be screened at least in terms of the possibility of there being other children with lead poisoning in a particular neighborhood. There is a row of houses, all built at the same time by the same person, there is a high chance that there will be other children on that block in that community who will also be potential candidates for lead poisoning, and if they are identified then those homes will be subsequently inspected.

Mr. WALGREN Thank you, Mr. Chairman.

Mr. WAXMAN. Thank you very much.

Our last panel is composed of Dr. Ellen Silbergeld, chief toxic scientist for the Environmental Defense Fund, and Dr. Barbara Starfield, Department of Health Services Administration at Johns Hopkins University.

Dr. Starfield is testifying today on behalf of the American Public Health Association.

I want to welcome you.

And we also have accompanying our witnesses that I have introduced, Dr. Devra Lee Davis, a faculty member of the Johns Hopkins Univerity School of Hygiene and Public Health, who will be here to answer questions.

I think there was some confusion on communications with Dr. Davis. If she wishes to add a statement in the record, we will be pleased to receive it so that we will have the further benefit of her views.

Let's start with Dr. Silbergeld.

STATEMENTS OF ELLEN K. SILBERGELD, PH. D., CHIEF TOXICS SCIENTIST, ENVIRONMENTAL DEFENSE FUND; BARBARA STARFIELD, M.D., M.H., ON BEHALF OF AMERICAN PUBLIC HEALTH ASSOCIATION; AND DEVRA LEE DAVIS, BALTIMORE, MD.

Dr. SILBERGELD. In addition to presenting the views of the Environmental Defense Fund, of which I am the chief toxic scientist, I

am also personally pleased to discuss this issue before your committee today, because I was involved for 10 years in basic research on lead poisoning, specifically the nature of the adverse effects of lead exposure on the developing brain.

For some reason, lead poisoning exerts an extraordinary fascination upon this administration. We have lived through about 8 months of negotiations, ultimately concluded, which have reinstated the phasedown program to keep lead out of gasoline. We may be about to live through another nightmare concerning the prevention of occupational lead poisoning. Today we are attempting to determine whether we will indeed even look for lead poisoning when it occurs in our population.

I want to talk about three issues primarily related to current knowledge about the nature of lead poisoning in this country, which argue strongly and specifically for preserving and strengthening the categorical status of the program perhaps over some of the other concerns which confront you in the area of maternal and child health.

Building on 10 years of work, based on an important article by Dr. Jane Lin-Fu in 1973, we now know that for lead there really is no margin of safety in terms of exposure, that many of its effects on the brain are irreversible and that, as a consequence, detection and early intervention remain the only adequate methods of treatment.

All the maneuvers I referred to earlier as going on in this administration, coupled with the dismantlement of the program in HUD which deals with many of the housing problems of concern to Congressman Walgren impact directly on children. Children are the most sensitive to lead in terms of the severity of effects which are observed.

At the level of the nerve in the brain, lead interferes with chemical processes of information transfer, with no threshold for its effects. Those thresholds which appear to exist in medical practice for the effects of lead in children are probably provided by physiological processes which keep lead from entering the brain and being taken up by nerve cells.

However, once lead enters a nerve, it is very difficult, if not impossible, to remove it by any of the strategies of chelation therapy or other techniques which you have heard of earlier. At our present state of knowledge, blood level concentrations are the best indicator for current exposure to lead. By obtaining accurate and proper measurements of blood lead, it is possible for physicians and health workers to intervene and propose medical treatment to reduce the circulating levels of lead and prevent large amounts from reaching and binding to cells in the brain.

On page 4, I have included the results of a study undertaken in collaboration with Dr. Julian Chisolm of Johns Hopkins showing blood lead on the X-axis and an indicator of altered brain metabolism, HVA in urine, shown on the Y-axis. There are several interesting factors about the curve.

First, as blood lead increases, the alteration in brain chemistry is also increased.

Ms. SILBERGELD. Second, there were significant outliers from the regression line, which are not shown on this graph. These repre-

14-591 O - 83 - 6

sented children who had repeated episodes of lead poisoning. Put very simply, that is, if a child came in for the second, third, or fourth time, then for a given level of lead in blood that child had an even greater increase in this metabolite in brain chemistry. The other point to keep in mind is to do this research requires hospitalization and extensive treatment of children, measurement of lead in urine and blood. The costs were probably in excess of $250,000.

Among the diseases caused by external agents, the need for early intervention is compelling in the case of lead poisoning. Exposure of children to very low levels of lead adversely affects neurobehavioral development. There are now several new studies conducted in this country, England, and West Germany, which demonstrate significant deterioration in intelligence associated with what used to be called subclinical or asymptomatic lead poisoning.

Those very names should indicate to you the need for an aggressive screening program. "Subclinical"—below the level of expressing clinical signs, "asymptomatic"—in the absence of overt detectable symptoms. The nature of low level lead poisoning is such that it can and does easily escape detection by clinicians. Treatment is vital before the effects of lead are symptomatic or clinical, unequivocal and overt. At such stages as these early asymptomatic-subclinical stages, identification can only be made by screening programs using the biological indicators as blood lead or EP tests.

Ms. MIKULSKI [presiding]. May I ask you a question here?

I don't mean to sidetrack the testimony, but is the technology available, and I don't mean rarely available, to really do the diagnosis that you are referring to? There is an example for PCB. What does it mean?

Again, Johns Hopkins is doing an environmental study to detect this in the State of New York. The levels that you are talking about, can we really do it with blood tests, or is it the kind of thing we have to fly to California because there is only one lab in the world that does it?

Ms. SILBERGELD. No; we are very fortunate that we can measure lead in blood down to extremely low levels; indeed, by fairly inexpensive instrumentation. I am referring to the anodic stripping voltametric technique.

Again, as Ms. Ehrnman pointed out to you, this instrument has been developed and is now in use in many of the large cities and public health screening programs in this country. It as been endorsed by the Centers for Disease Control.

The technology exists. Now, the technology for determining that an effect has been induced in a child's brain is very difficult. So, if we are going to wait until we can see these symptoms, these subtle effects in behavior which may be very difficult to see in the preschool child—and I will get to some of the nature of this evidence—then I think it is a hopeless battle. We will be back to looking for lead lines in teeth, X-raying the stomach contents, waiting for seizure, malaise, fatigue, and what used to be called the overt symptomatology of lead encephalopathy.

Ms. MIKULSKI. I understand.

Ms. SILBERGELD. That really speaks to the point I am moving to, and that is that the studies that have been done which demonstrate a connection between these lower levels of blood lead and ef-

fects on children's brains have been done in children, none of whom were diagnosed at the time of their active exposure as being lead-poisoned. None of these children came to the attention of the relevant public authorities in London, Boston, or Dusseldorf as being lead poisoned. It was only the basis of retrospective studies done by tooth lead analysis, that one detected that they were indeed overburdened with lead.

Now, it has been argued by some that the effects of lead on intelligence and learning which have been reported at these low levels of exposure are not large, that they amount to a drop of five points in the mean IQ scores of children measured many years after their encounters with lead. If you look on page 6, I think you really can gain an appreciation of what this effect means. This does not just mean that, for example, children who have lower levels of lead—and really have to be categorized this way, because we all have body burdens of lead—children at the lower lead category achieve IQ scores as high as 135, whereas children with higher lead burdens in the tooth measurements do not achieve any IQ score higher than 120.

But what has happened here is that the entire curve is shifted to the left. We are losing that entire segment of intellectual performance as a result of very low levels of lead exposure in a large group of children, none of whom were ever diagnosed as suffering from lead poisoning.

This is a very serious effect for both the individuals at risk, obviously, and it it important for society, which must deal with large numbers of untrainable and unproductive members.

Indeed, the Public Health Service is considering the recommendation that lead screening be part of the routine clinical evaluation of all children in this country, or at least that was its proposal until its decimation submitted by OMB yesterday.

Now, I would like to also bring to your attention another item of research interest with regard to lead. New clinical and experimental information indicates that the unborn child may be at even greater risk for the effects of lead than children after birth. Both the male and female parent appear to be able to convey lead-induced neurologic deficits to their children. For that reason, we suggest that the national lead screening programs need to be expanded to cover persons of childbearing age, so that programs of special intervention, such as dietary compensation and alleviation of exposure, can be put in place to ameliorate these potentially devastating effects. Also, information on prenatal and pregestational effects of lead will aid in developing appropriate strategies for asessing the extent of this exposure and for appropriate methods for controlling it.

We find it cynical that an administration which repeatedly voices a concern for children to a biological extreme can disregard the evidence for lead as a fetotoxin, teratogen, a germ cell mutagen and neurotoxin of particular potency in its attack on the young child's brain.

All these lines of evidence support the childhood lead screening program and indicate that it must be retained and strengthened within the Centers for Disease Control.

There are many compelling medical public health reasons for this specific recommendation.

First, in order to assign appropriate strategies to prevent the continuing epidemic of lead poisoning on a national basis, it is imperative to maintain lead poisoning as a reportable disease within the purview of the Public Health Service. Now, you heard some vague promises from Dr. Hardy earlier this morning that some sort of voluntary reporting system will remain in place, even after the devastation of this program. I think that is highly unlikely. Without the documentation available from the interface of the CDC and the National Center for Health Statistics, we would never have gained the information which showed so clearly that lead in gasoline was an important source of lead in children's bodies and an important cause of lead poisoning in these children.

Second, even from a cost-effective point of view, it is clear that CDC should continue to run an expanded lead screening program. Fragmentation of the screening program into State and local entities will greatly increase the expense of this program, particularly such vital aspects as quality control and data gathering. Now, we talked a little bit earlier about the instrumentation and the mechanisms which are undertaken to screen children for lead. Maintaining appropriate quality control of lead screening laboratories is a very difficult task. The Center for Disease Control, in collaboration with the National Bureau of Standards, has developed a performance-oriented program whereby State and local laboratories can know that they are performing within appropriate criteria; that their results are accurate. To remove this program from a national focus would diminish this quality control aspect so vital to the recognition and intervention in lead poisoning.

Third, to embark on any policy which in all likelihood will lead to the diminution, if not destruction, of this program will cause tremendous costs to accrue from the undetected and untreated cases of lead poisoning. These cases will eventually come to our attention, but they will come to our attention at a point when they are no longer treatable, and when the consequences for society are truly devastating. I have included on page 9 some data that was developed by Dr. George Provenzano, on the Environmental Protection Agency, on the societal causes of intellectual deficits associated with lead. At the bottom line, they indicate costs between $500 million and $1 billion. Keep in mind that these costs are based on the 1978 health costs which this committee recognizes are low at the present time. There are also based on estimates of the prevalence of lead poisoning which we now know are under estimates on the basis of CDC's data gathering. Thus, the real costs of untreated lead poisoning in this country are conservatively in the range of billions of dollars. The destruction of the lead screening program, as proposed, will block our window on an enormous public health epidemic.

It will obstruct and decrease the efforts of community health workers to detect and treat lead poisoning. It will eliminate information which might guide programs of environmental cleanup and source control, ranging from abatement of old housing to modifications of the Clean Air Act. It is this latter aspect which perhaps explains the special energy with which this administration contin-

ues to attack all aspects of lead poisoning. Never send to know for whom the bell tolls, admonished the poet Donne. This is no less than an attempt to cut down the bell and silence bellringers by those who do not wish to act on its conclusions.

Lead poisoning is the clearest instance of an environmental disease that we have before us. If we cannot act to prevent this disease, how much more feeble will our efforts be to protect American health before the onslaught of other toxic substances against us.

Thank you.

[Dr. Silbergeld's prepared statement follows:]

TESTIMONY

OF

DR. ELLEN K. SILBERGELD

CHIEF TOXICS SCIENTIST

ENVIRONMENTAL DEFENSE FUND

On behalf of the Environmental Defense Fund, I am pleased to present testimony on the childhood lead screening programs in the United States. The Environmental Defense Fund is a national nonprofit organization, with 50,000 members, staffed by scientists and attorneys at five regional offices in New York, Washington, Richmond, Boulder, and Berkeley, and dedicated to the development of rational approaches to environmental problems. I am Chief Toxics Scientist of the Environmental Defense Fund; in addition to representing the concerns of my organization, I have a longstanding interest in the issue of lead poisoning. I spent ten years as a research scientist, at the Johns Hopkins Medical Institutions and the National Institutes of Health investigating the adverse effects of lead exposure. I have published many papers and reviews on the subject of lead toxicity.

These hearings provide a forum for discussing what is probably the most significant and pervasive environmental illness in this country. In the past decade, since Dr. Jane

Lin-fu's seminal reappraisal of the lead poisoning problem, there has been an extraordinary expansion of our knowledge of the health hazards of low level lead exposure. Experimental research has confirmed the concerns of physicians, that for lead there is really no margin of safety, that many of the effects of lead are irreversible, particularly for the brain of young children, and that detection and early intervention remain the only adequate methods of treatment.

Moreover, these hearings do not take place in a vacuum. This administration appears determined to make lead a central issue in their philosophical approach to the environment, occupational health and safety, and public health. Earlier this year, the Environmental Protection Agency attempted to subvert the very modest lead phase-down program by proposing regulations which would have increased the use of lead as a gasoline additive. That effort has now been retracted, due in large part to the clear evidence, arising from the childhood lead screening program, that lead from gasoline contributes significantly to the continuing problem of lead poisoning in this country. The Occupational Safety and Health Administration, conforming to the express wishes of the Office of Management and Budget and the Regulatory Reform group at the White House, is preparing to revise the occupational lead

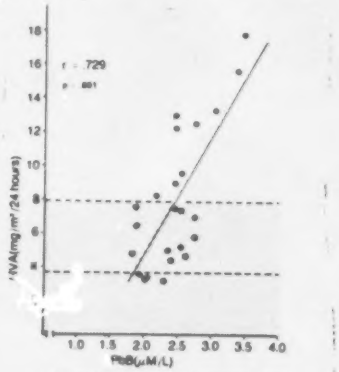
standard, a move which if successful will permit significant increases in ambient lead concentrations in industry. The Department of Housing and Urban Development, charged by the courts to implement the provisions of the Lead Based Paint Poisoning Prevention Act, has responded by dismantling its expertise in the area of lead poisoning. Without its research office, the Department will not be able, even if it wished to do so, to determine the efficacy of various strategies which have been proposed for abatement of the lead paint problem.

All these moves affect one group particularly: our children. Children are the most sensitive to lead, in terms of the small amount of lead required to affect them, and in terms of the severity of affects observed.

At the level of the neuron in the brain, lead interferes with chemical processes of information transfer with no threshhold for its effects. What threshholds appear to exist for the effects of lead in children are probably provided by physiological processes which keep lead from entering the brain and being taken up by neurons. Once lead enters a neuron, it is very difficult, if not impossible, to remove it.

Blood lead concentrations are the best indicator for current exposure to lead; by following these measurements, it is possible to intervene and by appropriate medical treatment

to remove circulating and peripherally stored lead from bone and other organs possibly before it reaches and is bound to cells in the brain. On the basis of collaborative research with Dr. J. Chisolm of Johns Hopkins, we have reported a significant relationship between levels of lead in blood and a biological indication of altered brain chemistry (see fig. 1).



Urinary homovanillic acid, excreted in 24 h quantitative collections, as a function of blood lead concentration in 36 children, aged 14–48 months.

Among diseases caused by external agents, the need for early intervention is compelling in the case of lead poisoning, based on what is now known of the mechanisms and progress of the intoxication. Exposure of children to very low levels of lead adversely affects neurobehavioral development. There are now several studies, conducted in this country, England, and Germany, demonstrating significant deterioration in children's intelligence and behavior associated with what used to be called "subclinical" or "asymptomatic" lead poisoning. This

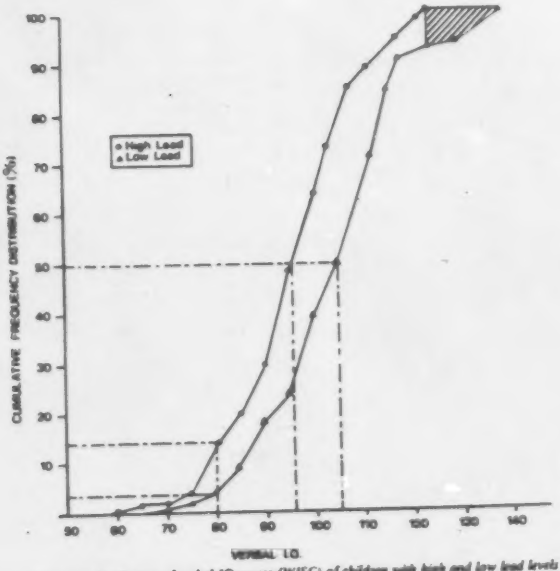
fact cannot be overemphasized in guiding our evaluation of the medical approaches to preventing irreversible lead toxicity. The very names are indicative of the need for aggressive screening programs: the nature of low level lead poisoning is such that it can and does easily escape detection by clinicians. Intervention and treatment is vital before the effects of lead are unequivocal and overt. At such stages, identification can only be made by screening programs, using the biological indicators of blood alead and erythrocyte protoporphytion. We have known since the work of Byers in 1943 that, when lead neurotoxicity is recognizable, its long term sequelae are usually inexorable. The studies of Needleman, in Boston, and Winneke, in Dusseldorf, and Yule, in London, exemplify this: the neurological deficits in the children studied persisted long after they were exposed to lead; lead exposure was determined by measurements of tooth lead content, a marker which sums the overall experience of the child with environmental lead. It is relevant to note that none of these children were diagnosed at the time of their active exposure, as being lead poisoned.

It has been argued that the effects of lead on intelligence and learning which have been reported are not large, for example, amounting to a drop of five points in mean IQ scores. However, a drop of five points in mean IQ across the range of IQ, as was found by Needleman,[1] will result in a doubling of the number of children with IQs below 70 -- that is, a doubling

---

[1] Needleman, H.L., Leviton, A., and Bellinger, D. N.E. Journal of Med. 306:367, 1981.

in the number of children defined as retarded (see figure 2).



Frequency distribution of verbal IQ scores (WISC) of children with high and low lead levels in deciduous teeth.

This is a serious effect, both for the individuals at risk, and for the society which must deal with large numbers of untrainable, and unproductive members. The Public Health Service is considering the recommendation that lead screening be part of the routine clinical evaluation of all children in this country.

New clinical and experimental information[2] indicates that the unborn child may be at even greater risk for the effects of lead. Both the male and female parent can convey lead-induced neurological deficits to their children. For that reason, the national lead screening programs need to be expanded to cover persons of childbearing age, so that programs of special intervention, such as dietary compensation, may be put in place to ameliorate the effects of lead. Also, information on prenatal and pregestational effects of lead will aid in developing appropriate strategies for assessing the extent of such exposure and methods for controlling it. It is cynical that an administration which repeatedly voices its concern for children to a biological extreme can disregard the evidence for lead as a fetotoxin, a reproductive teratogen, a germ cell mutagen, and a neurotoxin of special vigor in its attack on the young child's brain.

The childhood lead screening program must be retained and strengthened within the Centers for Disease Control. There are many compelling medical and public health reasons for this recommendation. First, in order to design appropriate strategies for preventing continuing epidemics of lead poisoning on a national basis, such as the continued removal of lead from gasoline, it is imperative to maintain lead poisoning as a reportable disease within the Public Health Service purview. Without the documentation available from the interface of the CDC database and the National Health and

---

[2] Silbergeld, E.K.: Behavioral teratology of lead. In J. Yanai (ed) Behavioral Teratology, Amsterdam, Elsevier, in press.

serves an invaluable function to provide essential quality control over the actual measurement of lead in blood of children. Blood lead measurements are technically difficult to perform, since the process requires great care in collection and analytic procedures, and the actual methodology for measurement -- whether by instrumentation using atomic absorption spectrophotometry or by the newer methods of anodic stripping voltammetry -- must be repeatedly calibrated. The CDC has developed a national system of proficiency testing, so that communities, medical personnel, and public health officials can be assured of the reliability of data on extent of lead poisoning in their patients, communities and relatives. There is no assurance that state and local governments would be able to maintain such an ongoing monitoring program in the absence of CDC involvement. Most importantly, a national, reliable screening program is needed to provide the alert program of early detection and intervention. Early detection can only be provided by well-funded national programs of screening, using standardized methods. As you will hear from other witnesses, it is unlikely that states and local health agencies can adequately support

Nutrition Examination Survey (referred to as NHANES), no clear correlation between children's blood lead levels and gasoline lead additives would have appeared. Second, the CDC oversight lead screening programs.

Evidence presented before this committee should compel the judgment that medically the lead screening programs must be maintained. Even from a cost-effective point of view, it is clear that CDC should continue to run an expanded lead screening program. Fragmentation of the screening program into state and local entities will increase expenses, particularly of such aspects as quality control and data gathering for

public health assessment purposes. Further, to embark on any policy which in all likelihood will lead to the diminution, if not destruction, of the lead screening program, will cause tremendous costs to accrue from undetected and hence untreated cases of lead poisioning. Provenzano[3] has estimated the costs associated with low level lead poisoning, as shown in Table 1, as between $500,000,000 and $1 billion. These data,

. Estimates of the costs of lead-induced health and intellectual deficits in the U.S., 1978

Adverse effect	Individuals affected (1,000)	Cost factors (1978 dollars)	Costs (10^9 dollars)
Undue lead absorption in preschool children			
Urgent risk	39.2[a]- 77.4[b]	1,518	59.5[a]- 117.5[b]
High risk	99.6 -189.5	740	66.6 - 140.2
Moderate risk	349.7 -633.8	—	—
			126.6 257.7
Lead-induced intellectual impairments in school-age children			
Mild mental retardation	5.9 - 14.6	1,600	9.3 - 23.4
Special learning disabilities	164.4 -264.3	2,510	272.5 - 660.8
			281.8 713.2
Lead-induced intellectual impairments in adults			
Mild mental retardation	16.2 - 48.9		
Employment loss			
Males	8.1 - 22.0	14,500 × .02 × .04	4.3 - 10.5
Females	8.1 - 22.0	7,702 × .03 × .12	4.5 - 19.0
Earnings loss			
Males	8.1 - 22.0	14,500 × (.02-.04) × .14	14.5 - 36.0
Females	8.1 - 22.0	7,702 × (.03-.12) × .13	3.7 - 0.0
			27.0 66.3
Total			439.4 1,096.2

[a]Individuals in central cities.
[b]Individuals in SMSAs.

3 Provenzano, G. "The social costs of excessive lead exposure during childhood." In Needleman, H.L. (editor) Low Level Lead Exposure, New York, Raven Press, pp. 299-315, 1980.

calculated in 1978, were based on a lower incidence rate for lead poisoning than that recently reported by CDC, so that, together with the increases in health-associated costs noted by this committee and others, the real costs of untreated lead poisoning in this country are conservatively in the range of billions of dollars.

The destruction of the lead screening program will block our window on this enormous epidemic. It will obstruct and decrease the efforts of community health workers to detect and treat lead poisoning. It will eliminate information which might guide programs of environmental cleanup and source control. And it is this latter aspect which perhaps explains the special energy with which this administration has attacked all aspects of lead poisoning. "Never send to know for whom the bell tolls," admonished the poet Donne; the dismantling of the lead screening program is no less than an attempt to cut down the bell and silence the bell ringers by those who do not wish to hear its warning or act on its conclusions.

Ms. MIKULSKI. Thank you very much, Doctor.

Mr. Waxman had to leave. I am running the whole show. So, I want to thank you for your testimony, and we are going to hear from Dr. Starfield and Dr. Davis, and then we will move to questions.

STATEMENT OF BARBARA STARFIELD, M.D., M.P.H.

Dr. STARFIELD. Thank you.

I am delighted to be here. I am a physician on the staff of the Johns Hopkins Medical Institution. I am a member of the American Public Health Association, and I am here today on their behalf.

I have a longstanding interest in the causes of diseases in childhood and devising and evaluating the effectiveness of health programs to deal with them.

I know the value of data obtained judiciously and parsimoniously and am involved in a variety of activities to increase the usefulness of data.

I know about lead poisoning from a clinical vantage, for I have personally seen and treated children with it, and I know about it from a public health point of view because of my involvement in several projects in which lead poisoning was of concern.

Lead poisoning is a significant clinical problem with both acute and chronic manifestations. Acute toxicity in children, which is much less common now than it was 20 years ago, produces injury to the brain, permanent retardation, and sometimes death. Chronic poisoning, which is insidious in onset, produces behavioral difficulties and neurologic problems that affect behavior and interfere with learning and education in school. The burden on society from lead poisoning extends far beyond the handicap suffered by the individuals affected. For example, the presence of such disabled children in a classroom is disruptive and compromises the education of other children as well as that of the affected children. Failure to treat and eliminate lead poisoning is pennywise and pound foolish. It clearly represents a public health initiative in which the cost of prevention is far less than the cost of treatment and the burden on society of individuals disabled by the condition.

Prevention and management of lead poisoning is a major challenge. Lead is pervasive in our environment, particularly in older cities with dwellings painted with lead-based paint before its dangers were recognized. Leaded gasoline has been another major source of environmental contamination with lead.

Less pervasive but equally damaging is the exposure of children to lead-containing substances brought home from the workplace by parents.

Particularly in this era of scarce societal resources, it is imperative that approaches to prevention and management be effective and that they be efficiently deployed. An information system that accurately identifies populations at risk, facilitates the targeting of resources to those populations, and permits an ongoing monitoring of the effectiveness of those resources is more necessary now than ever before.

It is no longer sufficient to know that dollars have been spent on the problem or that services have been delivered. The taxpayer deserves to know that the resources are spent where they are most needed and in a way that produces a lasting impact.

What information do we need to assure the prudent expenditure of resources?

Almost 200 years ago, our forefathers had the wisdom to institute regular censuses of the population. Although they did not know about lead poisoning, the system they devised greatly facilitates our understanding of and attack on this and other health problems.

Figure 1, on the back of my document, shows what knowledge of the distribution of lead poisoning tells us about the problem. This is a chart of the frequency of lead poisoning according to characteristics of the census tract areas where children live in Baltimore. It shows that lead poisoning is much more common in areas where poor people live.

Collection of data on the occurrence of illnesses such as lead poisoning according to the area where people live is a responsibility of departments of health in cities. Few cities collect or display their data in the way shown in this graph, which was an exhibit that I prepared for testimony in a recent lawsuit to obtain increased resources for schools in locales with a relatively high proportion of poor children.

Cities should be encouraged to collect data in this way and should be given the resources to help them to do it, for it is the only way that we have to target resources at the local level to where they are most needed.

The National Center for Health Statistics, through its ongoing surveys, also provides useful information. Recent data from one of those surveys confirmed that children in poor families are much more likely to have evidence of lead poisoning than other children, and this is the case for the country as a whole.

Tables 1 and 2 show that lead poisoning primarily occurs among the poor and in central city areas. The data from this survey also showed that there were large declines in blood lead levels between 1976 and 1980 that are directly attributable to reduced use of lead in gasoline.

On the basis of these data, collected by the National Center for Health Statistics, the Environmental Protection Agency reversed its plan to weaken the restrictions on lead in gasoline. Information does help to make informed public policy.

The taxpayer has a right to know if our programs, whether they are organized by Federal agencies, by State agencies, or by local agencies, are having an impact on the occurrence of lead poisoning. States and cities should be required to account for their expenditures of funds by demonstrating that they are screening children at risk and reducing the frequency of lead poisoning, and the National Center for Health Statistics needs to maintain its surveys so that Congress can oversee national progress in the attack on this important health problem.

The attack on lead poisoning involves screening populations at risk, treatment of children with evidence of the condition, and interventions to prevent reoccurrence of disease. Techniques for

14-591 O - 83 - 7

screening are well established and have high reliability and validity if they are applied appropriately and to those who need them.

Medical management is also well established and efficacious. The major remaining problem is prevention of reoccurrence or progression of toxicity. Where toxicity occurs as a result of lead paint in homes, the standard approach involves scraping lead-containing paint from surfaces that are flaking or that are within the reach of young children.

Cities such as Baltimore require landlords to arrange for this procedure. However, a study in New York indicated that within a year or two a high proportion of homes that were "abated" in this manner were again shedding paint chips containing lead.

Clearly, children who have been identified as lead-poisoned must be followed to assure that they do not have evidence of new exposure. It makes no sense to spend resources for screening and treatment if the problem is permitted to recur.

Lead control programs involving Federal funds need to account for the efficient expenditure of those funds; agencies with responsibility to deal with the problem of lead poisoning should be required to provide information not only about whether they have identified those children at risk of lead poisoning but whether their identification has led to adequate management and prevented recurrence.

From a physician's vantage—a pediatrician's vantage—I want to know that efficacious diagnostic and therapeutic techniques are applied where they are needed and that they have a lasting effect.

I am concerned that there are plans to decrease the collection of information about public programs. With shrinking public resources, it is even more important now than it ever was before to assure that programs are working as they should. With cutbacks in funds, we need more information about their effect, not less.

It is of particular concern that the National Center for Health Statistics plans to reduce the frequency of its data collection—in the case of the health examination survey from every 5 years to every 10 years—and to reduce the number of individuals surveyed in its household interview survey.

In the latter instance, reductions in the size of the population that is surveyed makes it increasingly difficult to identify problems in subgroups of the population at high risk. And, as we have seen in the case of lead poisoning, it is these subgroups that are at great risk of health problems.

We cannot target our programs to deal efficiently with health problems if we do not know precisely where the problems are, where the resources are going, and whether the resources are accomplishing what they are intended to accomplish.

In addition to my concern about the population-based information from the National Center for Health Statistics, I am concerned that the lack of rigorous reporting requirements for lead-poisoning activities conducted under the block grants will jeopardize the program's future.

Without information on the scope and impact of expenditures, future expenditures cannot be justified and maintenance or increase of funds to continue vital surveillance and treatment activities may be undermined in budget debate.

I would hope that Congress would share with me these concerns. There is no point in supporting scientific and technologic advances in medical care if we, as a country, cannot devise a system to assure that those who need care actually receive it and do so in a way that results in benefit. We cannot know the extent to which this is the case unless we insist upon appropriate data collection and accountability for expenditure of public funds.

Thank you.

[Attachments to Dr. Starfield's prepared statement follow:]

Figure 1
LEAD POISONING -- BALTIMORE 1970 by. MEDIAN INCOME AND PERCENT PERSONS BELOW POVERTY LEVEL PER CENSUS TRACT 1969.

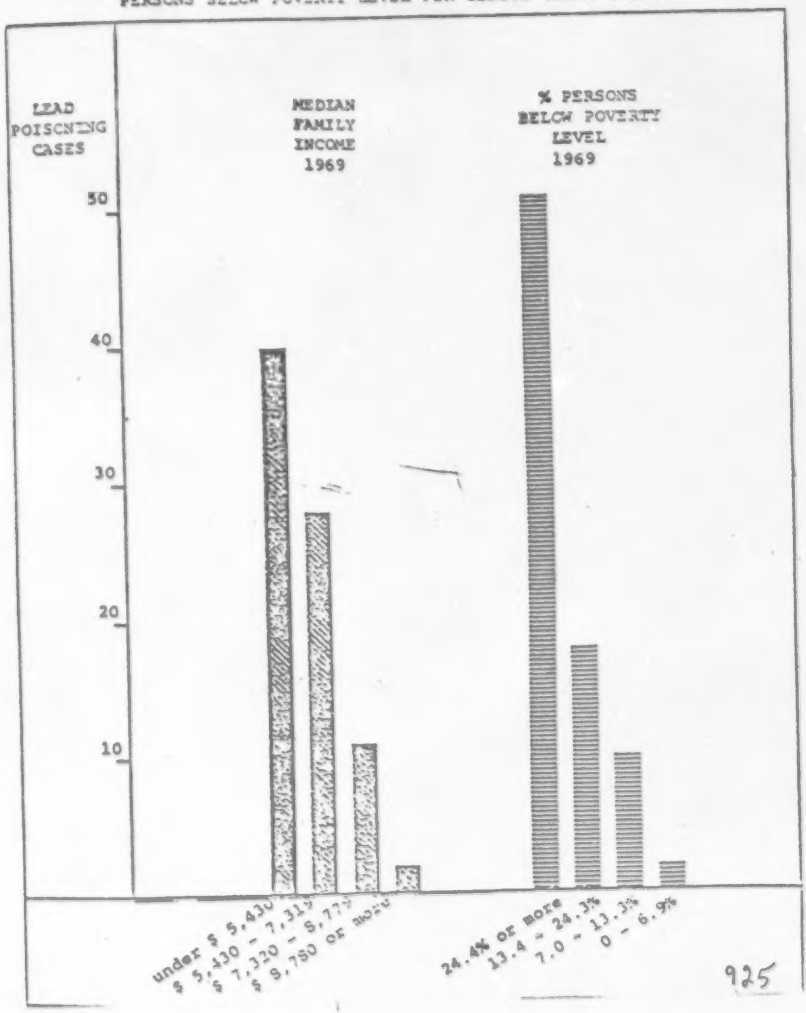


TABLE 1.—PRECENT OF CHILDREN WITH ELEVATED BLOOD LEAD LEVELS, ACCORDING TO FAMILY INCOME, UNITED STATES 1976–80

Family income	All races	White	Black
Less than $6,000	11	6	19
$6,000 to $14,999	4	2	12
$15,000 or more	1	1	3

Source: NCHS (Hanes) in New England Journal of Medicine, Sept. 2, 1982

TABLE 2.—PRECENT OF CHILDREN WITH ELEVATED BLOOD LEAD LEVELS, ACCORDING TO DEGREE OF URBANIZATION

	All races	White	Black
Large cities (1 million or more population):			
Central cities	12	5	19
Noncentral cities	4	4	[1] 3
Smaller cities (less than 1 million population)	4	2	[1] 10
Rural	2	1	10

[1] Small sample sizes.
Source: NCHS (Hanes); reported in New England Journal of Medicine, Sept. 2, 1982

STATEMENT OF DEVRA DAVIS

Ms. MIKULSKI. Dr. Davis, I understand that you have testimony to be submitted for the record. Is that correct?

Ms. DAVIS. That is correct.

Ms. MIKULSKI. Where is the testimony?

Ms. DAVIS. I have it here.

Ms. MIKULSKI. Could we have a copy? Is that your only copy?

Ms. DAVIS. No; that's fine, no problem.

Ms. MIKULSKI. Now, would you tell us for the record who you are and the nature of your involvement in lead poisoning screening diagnosis and prevention?

Ms. DAVIS. Well, my testimony includes a number of my affiliations, but I am here today primarily talking as a neighbor and parent and urban researcher.

I am on the faculty of Johns Hopkins School of Hygiene and Public Health, and I am also a reviewer for the national toxicology program. I am on the governing council for the Society of Occupational and Environmental Health, and I have a number of other affiliations and associations.

I guess I will spare you a reiteration, because in my testimony every single point that I make has really been made by other people here. I would just say that it is appropriate to invoke the Chinese proverb that says if you don't want to know the answer, don't ask the question. And right now, this administration is not asking the question of how pervasive is lead toxicity in our children, and it is ironic, as Dr. Silbergeld has remarked, that an administration that claims to be so concerned with the welfare of children is not collecting the minimal data to assess what the impact is of a number of major initiatives it is launching on the health and welfare of our children, as Dr. Starfield has indicated.

I would just tell you briefly about a very personal experience I had in my work at Hopkins, because I think in testimony such as

this it is important to learn about machines and technologies and how much it costs to do tests, but it is also important to keep in mind that there are real people involved in these numbers, and I would like to describe a situation I had last summer, if I may, when I met a lovely smiling 4-year-old little girl, much like my own, who was named Theresa. She was living in an area of east Baltimore, that you know very well, in a two-bedroom apartment with her mother, her 14-year-old sister and her 2-week-old niece who had just come from the hospital.

I was a little embarrassed that I had not noticed in the previous visit that the 14-year-old was pregnant, and all of a sudden, we saw this child, a low-birth-weight baby. The home had been deleaded according to Baltimore code, which says you take the lead off up to 4 feet, and if there is pealing leaded paint above 4 feet, the assumption is that the child would not have contact with it.

The deleading job was done, as many deleading jobs are done in Baltimore, by picking up labor on the street, giving them torches and letting them go and take the paint off in that fashion. That has two effects: It poisons the laborers who never are detected because they just appear to be a little bit lazier than otherwise might be, or may be drunk, or have the flu, and it also creates iatrogenic lead poisoning, because they make more lead chips in these homes because they have been deleaded improperly.

This little girl was a lovely little girl, but she did not speak complete sentences. After I turned to leave, as I had talked with her mother about what things they could be doing, she looked at me and she said, Mama, me go home by her. In her own way she may have understood that her home was unsafe. She wanted to come home with me.

In this part of east Baltimore, Dr. Julian Chisolm reported to the mayor of Baltimore last year that for more than 20 years, 4 out of every 5 children in that area have been lead poisoned.

Obviously, the past has not worked. I look forward to this committee's deliberations on this problem. I think there is no question but that we must reinstitute cleaning programs; otherwise, we cannot even assess our progress and provide new solutions so that the Theresas of this world will not want to leave their homes.

It so happens the National Zoo here has a curator who is determined that the prize pandas cannot eat city-grown bamboo, because it contains too much lead.

We don't have anyone who can tell us that about our children right now. It seems that our children have become not unlike the sentinel pheasants of the 1920's that Vernon Houk, of CDC, describes. These were delicate birds kept in cages on the outskirts of cities, and when they became sick, public officials knew a new epidemic was coming.

The need for warning about our children is past. The epidemic of lead poisoning of American children demands that we do better, and I welcome the deliberations of this committee to reinstitute lead-screening programs and consider what other programs can be developed.

Ms. MIKULSKI. Thank you, Dr. Davis. And we thank you for your testimony and hope that you can participate in the discussions.

Before I go to the specific questions to some of the witnesses, I have a couple of general questions that you could help us with.

The focus of this testimony, and Dr. Davis, you bring up a good point about the workers who are cleaning up lead, the focus of this testimony has been on children, and I think appropriately so, but then my question is, what about adults and both in terms of more specifically, I will come back to you, Dr. Silbergeld, in terms of the pregnant woman.

But what about the impact of the lead poisoning on adults? Is that detected? Is that even paid any attention to, and should we be concerned about adults and their ramifications for health needs? Does anyone have a comment on that?

Dr. SILBERGELD. In occupational settings, there have been considerable concerns and some monitoring of workers, primarily in those industries where one would expect there to be heavy contact between workers and lead, such as the smelting industry, paint formulation industry, and most recently the steelworking industry.

But there has been less pointed concern than perhaps there should be. It is always astounding for anyone working in lead to compare the median or average blood lead levels of any age group in this country with comparable age groups in other countries. It leads one to a very sobering realization of what a lead-exposed population we are.

The median blood leads in a country like Sweden or Belgium or Germany, all industrialized countries, and countries with automobiles that burn leaded fuels, are many points lower than our own. Median blood lead in this country, I believe, is somewhere around 13 mg/100 ml, and in Belgium or Germany it is around 8. In Sweden, it is about 6. So, we are all in a state of undue exposure. Dr. Clair Patterson, of the California Institute of Technology, has expressed this very vigorously and in great detail to the National Academy of Sciences. With the child as the focus of attention, our realization that the very young child is more liable to the adverse effects of lead has led to the logical extension of that question: What about the unborn child, the child in very early stages of intrauterine development?

As far as we can tell, from some of the very few epidemiological studies and from the more extensive animal studies, the very, very young child, the unborn child, is indeed possibly at greater risk than even the young child, the child 6 months to 2 years, which is the age group we commonly express concern about in public health.

There is also evidence from the occupational literature in humans, and from the animal literature, that lead is a mutagen of the germ cells. Its effects may be expressed even before parents conceive the child, and in some way those effects impact deleteriously upon perhaps specifically the neuronal development——

Ms. MIKULSKI. Would you say that again?

Dr. SILBERGELD. There are now several studies showing that lead exposure in low levels primarily done in workplace settings, but at levels that are not——

Ms. MIKULSKI. Let me see what is happening.

[Discussion held off the record.]

Dr. SILBERGELD. There are several surveys showing that workers exposed to lead-producing levels of blood lead which are not that much different from the American ordinary person not exposed occupationally; that is why I made the remark at the outset.

In those workers there is alteration of chromosomes, inhibition of fertility, and increased rate of spontaneous abortion. There is concern about the child that is not aborted and does reach term or near term and is born alive, but may indeed suffer what appears to be neurologic damage.

There is animal data confirming this.

Ms. MIKULSKI. Let me say this: You said that something had happened to either of the parents that there will create damage in their child even before conception?

Dr. SILBERGELD. That is correct. I think for that reason what we should be talking about here is an expansion of the lead screening program to cover those aspects of maternal and child health that impinge on the outcome of conception.

Ms. MIKULSKI. That was my question, and you are talking about really screening adults.

Dr. SILBERGELD. That is correct.

Ms. MIKULSKI. When I asked that question about adults, that was my point.

Dr. SILBERGELD. The only screening we do now is haphazard, particularly with all the exemptions granted by OSHA in occupational settings. It should be part of the total public health picture in this country.

Ms. MIKULSKI. Are you talking only about people of so-called childbearing age, or would you see screening of everyone in this country, including the elderly?

Dr. SILBERGELD. Well, in the case of females, females are born with our childbearing apparatus, and we carry it with us until we finish that process, so there is really no distinction.

In terms of the male, it is not clear yet whether the effects of lead on the germ cell of the male are on those tissues that produce sperm or on sperm themselves, which are recreated periodically.

Ms. MIKULSKI. So, what are you saying?

Dr. SILBERGELD. I am saying that lead poisoning is a national problem which affects——

Ms. MIKULSKI. No; I asked you, Doctor, are you recommending screening of all adults, or only those of childbearing age?

Dr. SILBERGELD. I think that the prudent procedure would be to screen all adults certainly up to the end of childbearing age, but with no lower cutoff point.

Ms. DAVIS. And if I may comment on the kind of screen that would be efficient there, it costs about 20 cents to do an erythrocyte protoporophoria screen. This is a very expensive test that can be done with a finger stick. That is a very expensive test that could be done for all persons of childbearing age, as well with children.

Dr. STARFIELD. I might point out that the very data systems that give us information on the prevalence of high lead levels in children also give us information on adults. The National Center of Health Statistics survey did do blood levels on adults so you can deduct from that survey populations that are at high risk whether they are children or adults.

Ms. MIKULSKI. Let me come right back. We probably have another 15 minutes worth of questioning.

[Brief recess.]

Ms. MIKULSKI. We are going to resume the proceedings and we will probably meet for about another 10 minutes.

Dr. Silbergeld, I have another question for you.

We talked about the type of screening. Earlier we heard from Mr. Johnson about other sources for lead in addition to two that we know, paint and gasoline. You heard the questions I raised, particularly about food and water supply. Could you tell me what is your estimate about how severe or dangerous those sources would be?

Dr. SILBERGELD. Well, first, airborne lead and specifically lead used as an antiknock additive in gasoline is probably the final source of a lot of the other sources of lead that we take into our bodies. That is, as Mr. Johnson pointed out, most of the lead in food—aside from the special cases of the lead solder in cans—comes from ultimately the combustion of lead in vehicles.

A lot of the lead in water comes from the same source. You have fallout of gasoline lead which enters surface water, migrates to ground water, and is taken up by drinking water supplies.

In addition, there are some special cases, including one which is raising concern currently, that is, the contribution of leaded waterpipes, particularly in urban areas. Now, the plumbo-solvency of piping, that is the ability of piping to leach lead into drinking water, is directly correlated with the acidity of the water. This may raise some other questions related to clean air. As water becomes more acid, and this has been demonstrated in Glasgow, the amount of lead that is dissolved in the water can go up. Indeed there was a sort of mini-epidemic of mild mental retardation among children in Glasgow, who were drinking water which wes held in lead-lined containers in their houses. The reason why the lead came out of the containers was because the water was unusually acid. So that is another area of concern.

You asked also about the contribution of lead in home gardening. There is, interestingly enough, a study that has been done in Baltimore of the content of lead in fruits, vegetables, and leafy vegetables, specifically tomatoes in home gardens grown in three inner city neighborhoods in Baltimore, as well as the content of the lead in the soil of those gardens. The results are to be submitted for publication to the New England Journal of Medicine. They are really quite astounding. Very, very high concentrations were found, some in neighborhoods where there is no lead-painted housing, so it appears to be quite directly correlated with traffic patterns and airborne lead. Obviously, the direct sources of lead for ingestion would be for people working or playing in their gardens, children playing in the dirt in those gardens, and people eating foodstuffs from those gardens.

Ms. MIKULSKI. This would be a question for all three of you. Do you feel that the States and local governments, do you think they are equipped to perform an ongoing monitoring program—I'm going to come back now to statistics—a monitoring program similar to what is being done at CDC?

Dr. STARFIELD. Some States and some cities are. Most are not. It is my impression, and I believe it is correct, that the CDC collects national data. It does not collect data by census tracts. So it is unable, really, to tell me exactly what areas of cities have the greatest problem.

I have asked them for that information and they indicate that they don't collect that way. So there is an enormous amount that we can do in terms of technical assistance to help cities and States develop data systems that can show where the problems really are. The capacity is poorly developed and only in some places.

Ms. MIKULSKI. Do you feel that if we establish a lead program back as a categorical program, placed responsibility back at CDC, that some of the problems that you address, Dr. Starfield, would be met?

Dr. STARFIELD. I think that it would go a long way forward. I would not like to see a stop though of what was done before because there were some gaps in our knowledge before. We could not really tell the extent to which our programs were assuring that children who are screened and found positive and then their homes were abated were, in fact, becoming repoisoned. There was no way to follow up specific children to see the extent to which they were cured.

So there is a lot more we could do in terms of data and the very beginning would be to go back to where we were and that is at the very minimum.

Ms. DAVIS. On that point if I may add, the Center for Disease Control reported, I think this February, that there has been 20,000 children who were under medical supervision for lead toxicity at a time when they estimated 600,000 required this supervision.

Now that suggests that we were, in fact, medically treating less than 10 percent of all children who may have required medical treatment and that suggests to me that we certainly, as Dr. Starfield just said, needed to have screening at a minimum but also needed to have more detailed followup.

Ms. MIKULSKI. Well, one of the things that concerns us is that that goes back to State and data gathering, that States are required to submit annual reports to the Secretary of HHS on which way they spent their money.

The form and contents of these reports is to be determined by the Secretary. It is Mr. Waxman's understanding and mine, however, that the Secretary left to the State the judgment as to what these annual reports contain and when they should be submitted. So far, no State has submitted a report for fiscal year ending September 30, so that there is now no uniformity and continuity, and I have, again, two questions.

Would you expect States to submit the information necessary to demonstrate effective targeting and accountability with respect to lead screening, and if the States don't submit this information to the Secretary, is there any other source for this data?

Dr. STARFIELD. I would not expect the States to do it. It takes some work to put together good data.

Traditionally, what is done in reporting is, one reports head counts—not even head counts, just the numbers of things, numbers of children screened, and you can't tell from the reports whether

they are the same children being screened twice or three times or five times, and you can't tell whether the kids who need to be screened are getting screened. All you know is, this year we screened so many; next year so many, and so many less. That is not useful as far as public accountability or expenditures of funds.

I have forgotten now the second part of the question.

Ms. MIKULSKI. If we don't get it from the States, is there any other place to get it?

Dr. STARFIELD. Oh, yes. The only other place to get information on where the problems are, are the surveys for the National Health Center for Health Statistics.

You know the plan is to cut back on the frequency of those surveys.

Dr. SILBERGELD. And they also use the Center for Disease Control lead screening program for their primary data.

Ms. MIKULSKI. Talk into the microphone because we can't hear for the record.

Dr. SILBERGELD. The Hanes health examination and nutritional survey does do lead levels.

Ms. MIKULSKI. If you are going to engage in a colloquy, make it for the record.

Dr. STARFIELD. They contract with CDC to do it but it is a national probability sample that they do it on.

Dr. SILBERGELD. Another point, just to exemplify something Dr. Starfield mentioned, is the issue of appropriate targeting so that you are picking up children at the greatest risk for the adverse effects of lead.

We can get ourselves convinced of a mythology of lead poisoning that it is only associated with old housing in disrepair and therefore we talk about screening programs in that target. Certainly, without the guidance of good statistics and good data, that is likely to happen. But I remind you that the important study which pointed out the effects of low levels of lead, these so-called symptomatic or subclinical exposures, was done on children who never would have been targeted if we relied on this kind of folk wisdom. Those were the children in Chelsea, Mass., studied by Needlemen and his co-workers at Harvard. These were not inner-city lead-belt children.

Ms. MIKULSKI. Well, I want to thank all three of you and everyone who participated in this hearing, and also the cheering squad. I see a group that has been in the back of the room nodding in approval, shaking their head in disgust, wringing their hands in dismay.

May I ask who you are?

Ms. BETTY ROBINSON. We are from the lead poisoning prevention program in Washington, D.C. We are some of the workers.

Ms. MIKULSKI. Well, we welcome you here and obviously your heart is in the right place and if only our budget met that.

We appreciate the data that you presented to us and also I think, in addition to your own testimony, the previous witnesses who really talked about the national consequences of undetected screening and undetected followup.

I think some new information has come to light, one of which is the issue of abatement which I think, being that as we went about

fixing the problem we did not realize that while we were fixing it we were creating more problems, which goes again to housing programs in cities and the kind of workers, and then the impact on workers I think which is new.

Then also we appreciate the fact that you so very clearly stated what gasoline content means, not only in terms of air and breathing but in terms of soil, water, and then when you mentioned the urban garden program in Baltimore for people helping themselves what this would mean.

That is very startling testimony that we literally are kiling ourselves and our children. So, we thank you for that testimony.

I would like to leave the record open until such time as the Chair chooses to close it because I know he wishes to submit additional information.

I feel secure in saying that I believe that the Chair will begin to examine how we can restore this to a categorical program and implement some of the recommendations that are made today for both the humanitarian and economic reasons that have been stated.

I have not given up on the idea of CHAP. It is great to have categorical programs, and obviously categorical programs do jobs that block grants don't do, but I ultimately believe that if we are going to protect the needs of our children, we need a comprehensive program that meets the needs of children from conception all the way through the time of maturity, and that by establishing that kind of program, by establishing the principles that we want to achieve in that program, both preventive that would go beyond early diagnostic and screening programs, that we know have their limitations to really meet that because it is lead poisoning we have to look out for; at the same time, those other concerns we have about learning disabilities and all the things that go into early detection and screening.

So we will advocate a return to the categorical, I still believe we need a CHAP. So we thank you for coming and we appreciate it very much.

[The following letter was received for the record:]

STATE OF ILLINOIS
OFFICE OF THE GOVERNOR
SPRINGFIELD 62706

JAMES R. THOMPSON
GOVERNOR

Categorical Funding for Lead Posioning Prevention Programs

It is the position of the Illinois Department of Public Health that any fragmentation of the Maternal and Child Health Services Block Grant would be deleterious to the administration of public health programs in communities throughout the state.

The concept of health block grants has given states new flexibility to work with local areas, to permit funding and program flexibility to meet local needs. The reduction in need for administrative oversight of many small programs has helped strengthen health services in a time of reduced funding. The Illinois lead poisoning prevention services is a case in point.

Historically, prevention of lead poisoning, particularly from lead based paint has been a significant health initiative at both the state and local public health levels. As part of the earlier Federal demonstration efforts, Illinois expanded efforts to eliminate and control this problem, with particular emphasis on the problem of lead based paint in older homes in urban areas. Using a combination of Federal, state and local resources, the Illinois initiative met and continues to meet the specific local needs. Where appropriate, the local programs address this problem and address it with the level of available resources which best meets the local need. For example, the City of Chicago has reduced its projected number of screenings from approximately 40,000 children to 30,000 because, in part, of the declining number of houses with lead based paint. In the remainder of the state/local agencies we expect to increase our screenings from 16,817 in 1981 to approximately 17,500 in 1982. In addition, in the past 12 months the state has seen an increase in the number of agencies, including local health departments, which are using local resources to provide lead poisoning screenings and follow-up services.

The flexibility of resources inherent in block grants has helped order priorities at the local level without prescriptive categorical oversight at the state level, oversight which may well miss direct need service levels.

Dismanteling the block grants will not help states and localities in assuring maximum service dollars for locally determined health needs. Congress should provide the time necessary for states to develop and evaluate the block grant concept. We believe that with time and a reasonably secure resource base the effectiveness of this approach in meeting the local needs, such as preventing lead poisoning, can be demonstrated.

* Hearing date: 12/2/82

[Whereupon, at 1:10 p.m., the subcommittee adjourned.]